

**HISTORIC STRUCTURES REPORT FOR
VANCOUVER BARRACKS, WEST BARRACKS
VANCOUVER NATIONAL HISTORIC RESERVE
HISTORICAL BACKGROUND AND CONTEXT**

Building 607 Infantry Barracks
Building 614 Post Hospital
Building 626 Dental Surgery
Building 636 Red Cross Convalescent House
Building 638 Artillery Barracks
Building 630 Quartermaster's Storehouse
Building 631 Hospital Steward's Quarters
Building 621 Hospital Sergeant's Quarters
Building 628 Mess Hall
Buildings 635-665 (7) NCO Duplexes
Buildings 602-673 (3) Multiple Garages

Prepared for National Park Service
Columbia Cascades Support Office and
Fort Vancouver National Historic Site

Ward Tonsfeldt
Katherine C. Atwood
Ward Tonsfeldt Consulting

December 27, 2003

Figure 1. 1934 aerial view of Vancouver Barracks with the West Barracks in the foreground. Oregon Historical Society image OrHi 24486

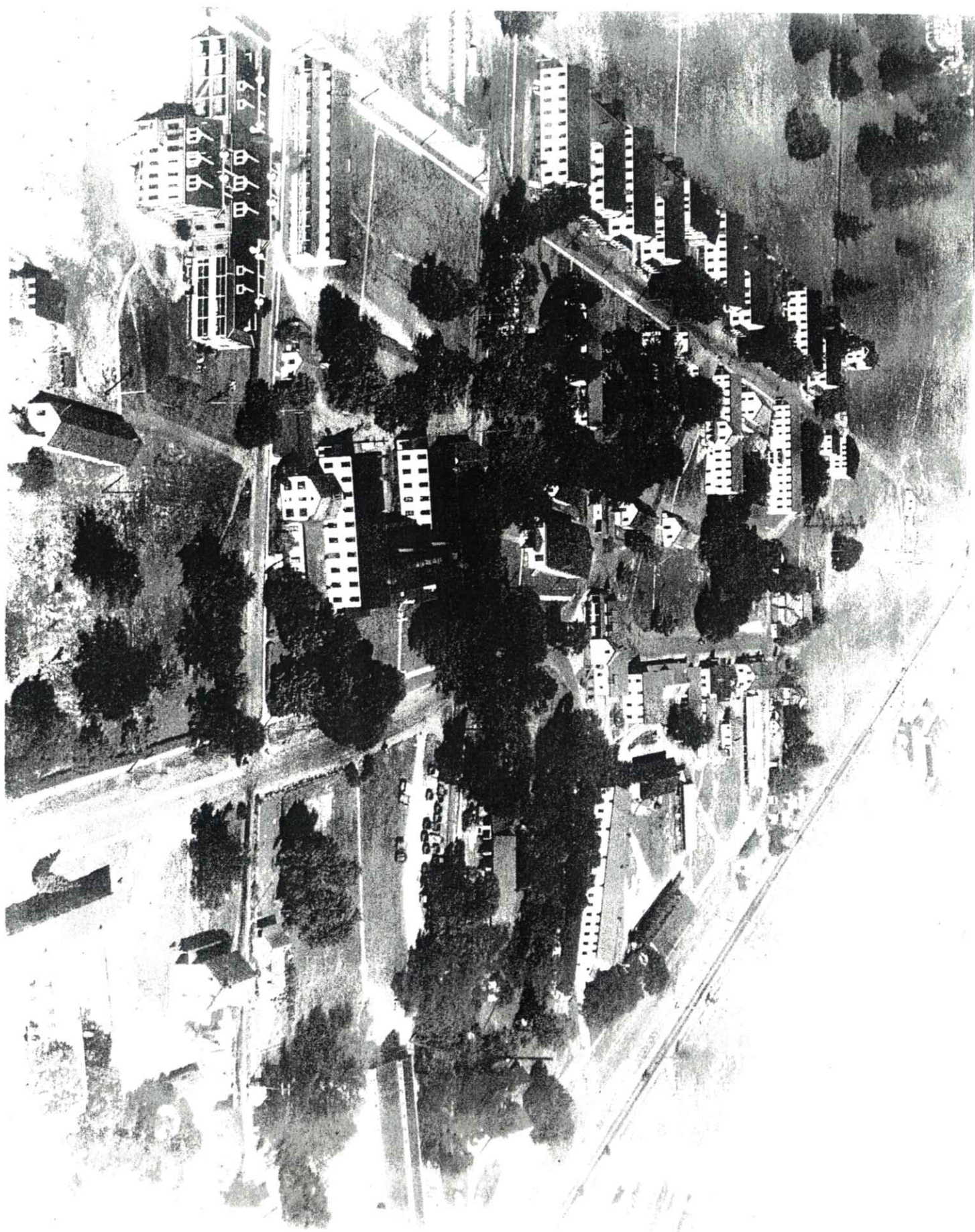


TABLE OF CONTENTS

Contents	ii
List of Figures	v
List of Tables	vi
List of Figures in Section IV	vii
Preface	x
I Overview of West Barracks Chronology and Historic Context	
Fort Vancouver and Hudson's Bay Company	1
Fort Vancouver and the U.S. Military	3
The Army at Vancouver 1850-1880	5
Vancouver Barracks and the Department of the Columbia	8
<i>Chronology: Vancouver Barracks and the West Barracks 1880-1913</i>	10
Building the West Barracks, 1880-1913	12
<i>Chronology: Vancouver Barracks and the West Barracks, 1914-1946</i>	19
Vancouver Barracks in World War I, the Depression, and World War II	21
Building the West Barracks, 1914-1946	23
Themes for Interpreting the West Barracks	24
II People and Events Associated with the West Barracks Group	
Theme I: The Garrison at Vancouver Barracks, 1880-1910	25
Units at Vancouver Barracks 1880-1910	26
Actions and Commanders, 1880-1910	28
Troop Movements, 1880-1910	34
Historic Personages with the Department of the Columbia, 1880-1910	44
Significance of the Department of the Columbia Garrison Theme	46
Theme II: Army Medical Care and Vancouver Barracks, 1880-1941	47
U.S. Army Medical Care and Facilities, 1880-1899	48
Medical Care and facilities at Vancouver Barracks, 1880-1899	51
Army Medical Care and Hospital Development, 1900-1917	54
Medical Care and Hospital Construction at Vancouver Barracks 1900-1917	57
Army Medical Care and Facility Development 1918-1941	59
Medical Care and Facilities at Vancouver Barracks: 1918-1941	65

Historic Personages Associated with the Medical Theme: 1880-1910	71
Significance of the Medical Theme	73
Theme III: The Spruce Production Division, 1917-1919	75
Aircraft for the War, and Spruce for Aircraft	75
The Summer of 1917	76
The Army's Response to the Summer of 1917	78
The Spruce Production Division and Vancouver Barracks	80
Solving the Labor Problem	85
Solving the Production Problem	88
The SPD and the West Barracks	91
Historic Personages Associated with the Spruce Production Division	96
Significance of the Spruce Production Division Theme	96
Theme IV: The Civilian Conservation Corps, 1933-1942	98
The Civilian Conservation Corps	99
The Civilian Conservation Corps at Vancouver Barracks	102
The Civilian Conservation Corps Building Program at Vancouver Barracks	107
The Civilian Conservation Corps and Medical Service	110
Historic Personages and the Civilian Conservation Corps Theme	112
Significance of the Civilian Conservation Corps Theme	113
III Design Elements and Character-Defining Details of the West Barracks Buildings	
Introduction	114
Army Architectural Practice, An Overview	116
1880-1899	
1900-1919	
1920-1941	
Vancouver Barracks Building Development	122
Design Elements of Military Administration Building and Barracks	
1880-1899	124
Building 607 Infantry Barracks	127
1900-1919	131
Building 638 Double Artillery Barracks	132
Building 628 Mess House with Kitchen	134
Building 630 Quartermaster's Storehouse	138
Design Elements of Military Hospitals	139
Building 614 Post Hospital	143
Building 626 Dental Surgery	145
Design Elements of Red Cross Convalescent Houses	146

Building 636	Red Cross Convalescent House	147
Design Elements of Army Dependent Housing		149
Building 631	Hospital Steward's Quarters	151
Building 621	Hospital Sergeant's Quarters	156
Buildings 635, 641, 642, 643, 644, 664, 665	Duplexes	157

IV Physical History Reports 160

Building 621	Hospital Sergeant's Quarters	160
Building 626	Dental Surgery	173
Building 628	Mess Hall with Kitchen	185
Building 630	Quartermaster's Storehouse	196
Building 631	Hospital Steward's Quarters	205
Buildings 635, 641, 642, 643, 644, 664, 665	NCO Duplexes	
Garages 602, 673, 676		219

Bibliography 243

Appendices

- A. Physical Histories of the Major Buildings by Kristin Baron (1998)
- B. Glossary

LIST OF FIGURES

Figure 1	1934 Aerial View of West Barracks	i
Figure 2	Map of Extant West Barracks Buildings	2
Figure 3	1854 Map of Vancouver Military Reservation	7
Figure 4	Photo of Flood at Vancouver Barracks	9
Figure 5	1874 Map of Vancouver Barracks	13
Figure 6	1892 Map of Vancouver Barracks	15
Figure 7	1908 Map of Vancouver Barracks	17
Figure 8	Summary Map of 19 th Century	18
Figure 9	Photo of a Company of the 14 th Infantry	30
Figure 10	Troops and Stock Boarding Train	34
Figure 11	1884 Post Hospital	53
Figure 12	Post Card View of Post Hospital	62
Figure 13	1919 Map of West Barracks	66
Figure 14	Organizational Chart of the Spruce Production Division	81
Figure 15	Spruce Production Division Mill Complex	82
Figure 16	Major Reordan Speaks at the Opening of the Vancouver Mill	83
Figure 17	Spruce Cantonment at Vancouver Barracks	84
Figure 18	Summary Map of World War I Development	92
Figure 19	Spruce Production Division Staff	95
Figure 20	Summary Map of World War II Development	103
Figure 21	Civilian Conservation Corps District Staff	104
Figure 22	Quartermaster's Form 117 for CCC Building 323	109
Figure 23	CCC Patients in Post Hospital	111
Figure 24	Infantry Barracks in 1887 Group	117

Figure 25	1872 Barracks Plans	125
Figure 26	QM General Meiggs' Barracks Plan	128
Figure 27	QMO Standard Plan 121 (Bldg. 607)	130
Figure 28	Detail Sheet from QMO Plan 75K (Bldg. 638)	133
Figure 29	QMO Standard Plan 93 (Bldg. 628)	135
Figure 30	QMO Standard Plan 93 Detail Sheet	136
Figure 31	QMO Standard Plan 116A	137
Figure 32	Plans for Pavilion Style Hospitals	140
Figure 33	Outdoor Sleeping Arrangements in an Army Hospital	142
Figure 34	Interior of Red Cross Convalescent House	148
Figure 35	1939 Photo of Hospital Steward's Quarters	153
Figure 36	QMO Plan for Hospital Steward's Quarters	154
Figure 37	QMO Plan 87C (Bldg. 621)	155
Figure 38	1939 Photo of Duplex Construction	158

LIST OF TABLES

Table 1	Major Actions for the Department of the Columbia, 1850-1900	5
Table 2	Extant West Barracks Buildings, 2002	14
Table 3	Units at Vancouver Barracks 1880-1910	26
Table 4	Troops Arriving 1880-1901	35
Table 5	Troops Departing 1880-1910	39
Table 6	Oregon Lumber Companies Employing SPD Soldiers	85
Table 7	Health Problems in Yaquina SPD District, Week of Aug. 27, 1918	93
Table 8	CCC Camps in the Vancouver District, 1939	106
Table 9	CCC Buildings at Vancouver Barracks and Camp Bonneville	108

LIST OF FIGURES IN SECTION IV, PHYSICAL HISTORIES

Building 621 Hospital Sergeant's Quarters	160
Figure 621-1 Front elevation faces north	165
Figure 621-2 Side elevation, faces west	165
Figure 621-3 Rear elevation, faces south	166
Figure 621-4 Side elevation, faces east	166
Figure 621-5 Detail, rafter tails	167
Figure 621-6 Interior, newel post and stair detail	167
Figure 621-7 Interior, living room, fireplace and radiator	168
Figure 621-8 QMO Form 173A	169
Figure 621-9 QMO Form 117	170
Figure 621-10 1937 Inventory	171
Figure 621-11 [1952] upgrades	172
 Building 626 Dental Surgery	 173
Figure 626-1 Front elevation, faces south	178
Figure 626-2 Side elevation, faces west	178
Figure 626-3 Rear elevation, faces north	179
Figure 626-4 Side elevation, faces east	179
Figure 626-5 Interior, treatment room	180
Figure 626-6 Interior, hall	180
Figure 626-7 Interior, 3-panel door	181
Figure 626-8 QMO Form 173A	182
Figure 626-9 QMO Form 117	183
Figure 626-10 1952 renovation plans	184
 Building 628 Mess House and Kitchen	 185
Figure 628-1 Elevation faces east	189
Figure 628-2 Elevation faces south	189
Figure 628-3 Elevation faces east	190
Figure 628-4 Elevation faces north	190
Figure 628-5 Interior, facing east	191
Figure 628-6 Interior, service window	191
Figure 628-7 QMO Form 117	192
Figure 628-8 Floor plan, 1937 inventory	193
Figure 628-9 Sheet 2, 1980 renovation	194
Figure 628-10 Sheet 3, 1980 renovation	195

Building 630 Mess House/Quartermaster's Storehouse	196
Figure 630-1 Front elevation, faces east	200
Figure 630-2 Side elevation, faces south	200
Figure 630-3 Rear elevation, faces west	201
Figure 630-4 Side elevation, faces north	201
Figure 630-5 Interior, showing lockers and interior door	202
Figure 630-6 Interior, showing fire damage	202
Figure 630-7 QMO Form 117	203
Figure 630-8 Floor plan, no date	204
 Building 631 Hospital Steward's Quarters	 205
Figure 631-1 Front elevation, faces north	210
Figure 631-2 Side elevation, faces west	210
Figure 631-3 Rear elevation, faces south	211
Figure 631-4 Side elevation, faces east	211
Figure 631-5 Detail of polygonal bay on front elevation	212
Figure 631-6 Detail of purlins	212
Figure 631-7 Interior, upstairs banister	213
Figure 631-8 Interior, front polygonal bay	213
Figure 631-9 Interior, fireplace in living room	214
Figure 631-10 Interior, light fixture	214
Figure 631-11 QMO Form 173A	215
Figure 631-12 QMO Form 117	216
Figure 631-13 [1952] plans, sheet 1	217
Figure 631-14 [1952] plans, sheet 2	218
 Buildings 635, 641, 642, 643, 644, 664, 665 NCO Duplexes	 219
Figure 640-1 Building 635, faces east	223
Figure 640-2 Building 641, faces north	223
Figure 640-3 Building 642, faces north	224
Figure 640-4 Building 643, faces south	224
Figure 640-5 Building 644, faces east	225
Figure 640-6 Building 664, faces south	225
Figure 640-7 Building 665, faces north	226
Figure 640-8 Detail, entry fanlight, building 642	226
Figure 640-9 Detail, entry millwork, building 642	227
Figure 640-10 Detail, masonry at first-floor window, building 665	227
Figure 640-11 Detail, exterior light, building 635	228
Figure 640-12 Interior 6-panel doors, building 664	228

Figure 640-13 Interior, radiator, building 664	229
Figure 640-14 Interior, stairs, building 664	229
Figure 640-15 Interior, French doors, building 664	230
Figure 640-16 Interior, newel post, building 664	230
Figure 640-17 Interior lock set, building 664	231
Figure 640-18 Building 602, Garage	231
Figure 640-19 Building 673 Garage	232
Figure 640-20 Building 676 Garage	232
Figure 640-21 WPA masons at work, 1939	233
Figure 640-22 Perimeter walls for type A duplex	233
Figure 640-23 Back porch and basement entry	234
Figure 640-24 Forms for window openings	234
Figure 640-25 QMO Form 117, type A duplex	235
Figure 640-26 QMO Form 117, type B duplex	236
Figure 640-28 Plans, 1938, sheet 1	237
Figure 640-29 Plans, 1938, sheet 2	238
Figure 640-30 Plans, no date, sheet 1,2	239
Figure 640-31 Plans, no date, sheet 1,2	242

Preface

This is the first part of the Historic Structures Report for the West Barracks buildings, Vancouver National Historic Reserve. The West Barracks is a “neighborhood” of Vancouver Barracks that has been distinct geographically since the first U.S. Army activities in the early 1850s. The term “West Barracks” has been used in recent times but is not an historical term for this part of the post. This report is tied to the extant buildings of the West Barracks, so it begins in the 1880s, which is the period of our first building. The report continues up to the World War II period. In 1946, Vancouver Barracks was declared surplus and no longer used as an active Army post. Some of the buildings of the West Barracks have remained in use since then, but their period of significance ends in 1946.

In some respects the years before 1880, when this report begins, were the most interesting ones for Vancouver Barracks. During this period the post was one of the most important military bases on the Western frontier. Officers who were to distinguish themselves in the Civil War, like Grant and Sheridan, were stationed at Vancouver Barracks. Later, during the Indian Wars of the 1870s, Vancouver Barracks was again a center of regional military activity. All of this came before the buildings that currently make up the West Barracks. The earlier structures are gone, but subsurface resources remain from the buildings and the men who inhabited them. As the West Barracks buildings and grounds are modified for adaptive re-use, we can expect to see some of the subsurface resources brought to light.

This report has four parts: a chronology of the West Barracks, a discussion of four historic themes relevant to the West Barracks, a discussion of the design elements in the West Barracks buildings, and a history of modifications on the West Barracks buildings. Findings in the first sections can be summarized as follows:

Theme I The Department of the Columbia Garrison, 1879-1913. The 14th Infantry and other units were stationed at Vancouver with responsibility for the entire Pacific Northwest. By the 1880s, the Indian wars were over, and the Army was engaged in responding to civil unrest including racial disputes in Seattle, labor strikes and riots, and anarchist activities in Idaho. Later in the period, the Army prepared at Vancouver for foreign wars, including the Spanish-American war and the Philippine Insurrection. By the first decade of the 20th Century, the garrison at Vancouver was no longer needed to defend Oregon and Washington, and in 1913, the Department of the Columbia was officially dissolved. In the years after 1913, Vancouver Barracks declined in importance, with the number of troops stationed on the post dipping as low as 150 men in the 1920s.

Theme II Army Medical Care, 1880-1941. Beginning with the construction of the 1884 Post Hospital, the West Barracks became the center of medical services for Vancouver Barracks. This continued through World War II. The construction of the 1905 Post

Hospital, which replaced the 1884 hospital, put the Vancouver medical establishment in the forefront of Army medical services. During World War I, the Post Hospital was enlarged with temporary satellite buildings to accommodate 500. Admissions for this period reached over 21,000, making the Post Hospital one of the most active military hospitals in the U.S. At the same time, the medical staff administered a sophisticated care and prevention program for 30,000 troops attached to the Spruce Production Division. These men served in isolated logging camps and saw mill communities throughout the Pacific Northwest.

Theme III The Spruce Production Division, 1917-1919. This branch of the U.S. Army Signal Corps produced spruce lumber for aircraft manufacture. The SPD was administered from Vancouver Barracks, and also built a large saw mill on the Vancouver Military Reserve, south of the Barracks. The SPD was a significant part of the U.S. military activity in World War I, and Vancouver Barracks was its center. No buildings in the West Barracks group were directly associated with the SDP except the medical services buildings, however.

Theme IV The Civilian Conservation Corps, 1933-1942 This New Deal organization was important for the Pacific Northwest as it worked to stabilize natural resources in public lands and to provide infrastructure in the form of roads, administrative buildings, and communications systems. Vancouver Barracks was the site of the Vancouver District of the CCC, which provided supplies and administrative services for 4,000-6,000 CCC men stationed in camps throughout Oregon and south-western Washington. Again, as with the SPD, the most tangible evidence of the CCC in the West Barracks is in the medical complex, which provided health care for the program.

The next section of the report deals with the architectural context of the West Barracks buildings. With the exception of the Post Hospital (614), the Red Cross Convalescent House (636), and the Dental Surgery (626) the West Barracks buildings follow standard plans provided by the Quartermaster General's Office. These designs were intended to be practical and economical, but also to incorporate a historicism that was consciously American. Designs for the Red Cross Convalescent House came from the American Red Cross, and the plans for the 1905 Post Hospital came from the Surgeon General's Office. Both of these buildings incorporate design ideas that connect to the medical thinking of their period.

The final section of the report traces the histories of changes and modifications to the buildings of the West Barracks group. The Appendix incorporates some work of NPS Historian Kristin Baron, who investigated the four major building in the West Barracks group in 1998. Since Baron has done an excellent job with the four major buildings, her entire text (23 pages) was appended. Baron's full report, with photos and plans is available in the National Historic Site Headquarters. Building history of the minor buildings in the West Barracks group was done for this report.

In general, the integrity of the West Barracks buildings is quite high, although there have

been some alterations of the exterior of the Post Hospital (614) , the two hospital administrators' residences (631,621), the Dental Surgery (626) and the Convalescent House (636). Modifications of the interiors are more extensive. The construction of Interstate 5 in 1952, required that part of the Post Hospital, the two hospital administrators' residences, and two of the duplexes be moved. These re-locations and the alterations that accompanied them are the most serious changes to the West Barracks buildings.

One conclusion of this study is that the medical services theme is the most central to the West Barracks group of buildings. Five of the buildings are associated with Army medical services, and the large brick Post Hospital is a "landmark" building in Vancouver, clearly visible on and off the post. Military medicine may not seize the public's imagination like battlefields or old cannons, but it is an important part of military history. Especially during the 19th and early 20th centuries, military medicine was associated with the general advance of health care and sanitation. Until 1861, Joseph K. Barnes was the Chief Surgeon at Vancouver. Later, he was Surgeon General and chief physician attending U.S. Presidents Lincoln and Garfield after they were shot by assassins. Barnes was a strong advocate of medical facilities at Vancouver. After his death in 1883, the 1884 hospital was named for him, as was the hospital built in 1941. The large red brick Post Hospital, completed in 1905, was not named for Barnes or referred to by that name in any official documents. This makes sense, since using the same name for the 1884 hospital and the 1905 hospital would have been confusing.

During World War I, the Post Hospital saw its greatest use, and it must have been a busy place indeed, with as many as 500 patients crowding the wards and the temporary buildings erected to the west and north of the main structure. Admission data for this period shows soldiers suffering from pulmonary infections, venereal diseases, hernias, and injuries from logging accidents. Toward the end of the war, the newly completed Red Cross convalescent facility served men returning from Europe, with lingering ailments and "shell-shock." This was the psychiatric aftermath of the war in the trenches, an early version of post-traumatic shock.

Although the buildings in the West Barracks group have been used intermittently in the past 50 years, they have the appearance of being vacant when compared with the East Barracks or the restored houses on Officers' Row. Large, seemingly abandoned buildings catch people's imagination and often enter into local folklore. There is an active local interest in ghosts and other supernatural occurrences in the West Barracks' two largest buildings, the Post Hospital and the Artillery Barracks. A book dealing with this subject is available at the Clark County Historical Society and there is a web site devoted to images of West Barracks ghosts. During the survey, members of our group spent considerable time alone in the buildings, especially the Artillery Barracks and the hospital, and saw no evidence of supernatural activity. One part of the Post Hospital that excites the public's imagination is a large tiled room in the Annex, supposedly a morgue. In fact, the room in question was the kitchen. There was a morgue, but it was located in another building and is presently incorporated into the Dental Surgery.

OVERVIEW OF WEST BARRACKS CHRONOLOGY AND HISTORIC CONTEXT

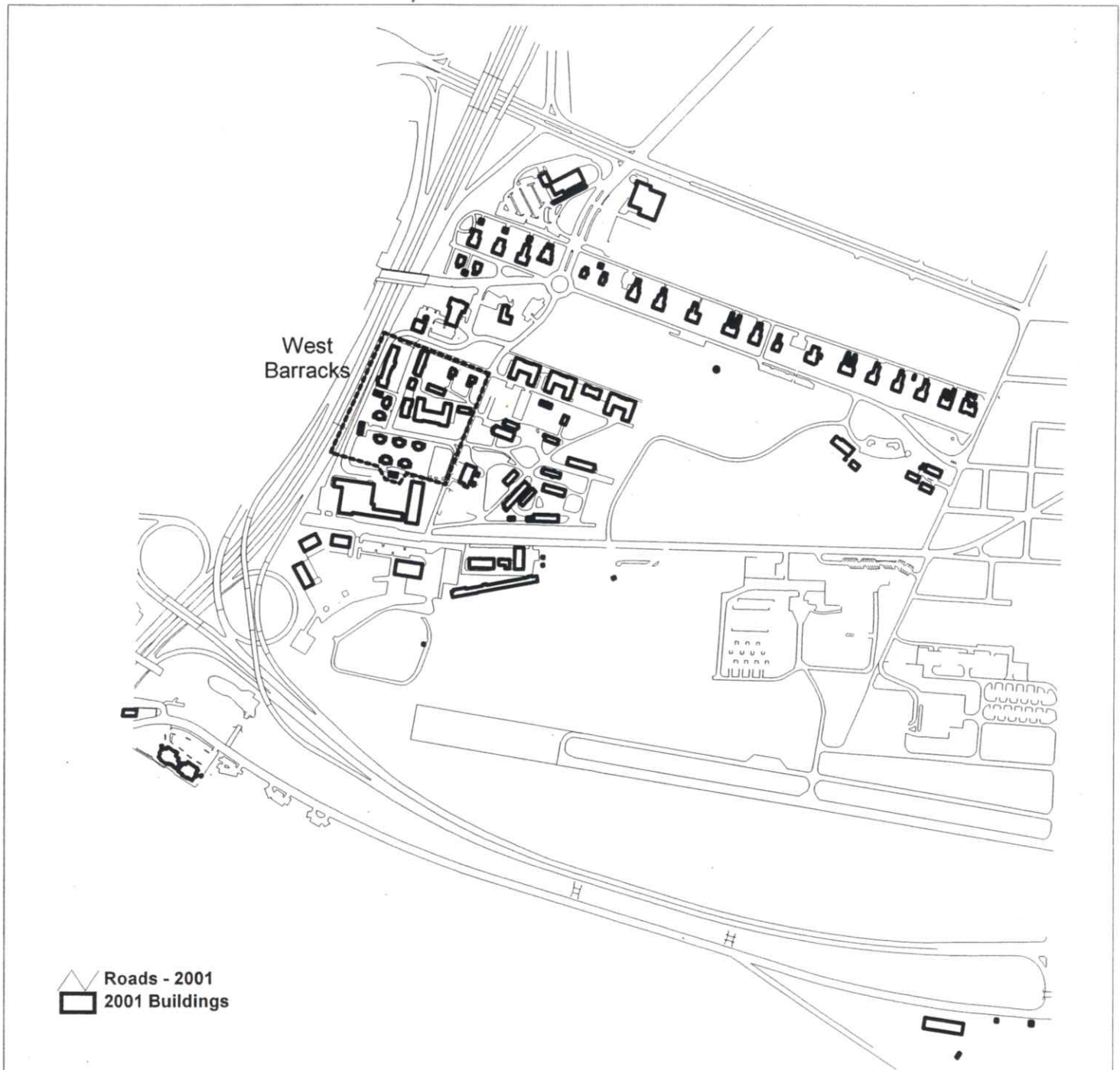
The West Barracks is the name applied to a portion of Vancouver Barracks that lies on the western boundary of the post. It is one of several “neighborhoods” on the Vancouver Military Reservation, like Officers’ Row, the East Barracks, or the historic Quartermaster’s Depot. The West Barracks first appears as a distinct part of the post on maps prepared in the early 1850s. This was soon after the U.S. Army staked their claim to the area around the old Hudson’s Bay Company Fort Vancouver and began building.

In the 1880s, the West Barracks became the location of the medical establishment at Vancouver Barracks, and that association has persisted. At present, the extant buildings on the West Barracks include the old Post Hospital and four other buildings devoted to medical services, two barracks, two service buildings, and a set of seven duplexes built by the Works Progress Administration in the late 1930s. This is hardly a homogenous group of structures, yet the buildings in West Barracks do have some historic and functional attributes that make them coherent as a group. It is probably best to view this area as analogous to a district or neighborhood in a civilian locale. The buildings that remain represent several periods in the post’s development and present several themes in the post’s history. The following discussion summarizes the history of Vancouver Barracks and places the West Barracks into that context.

Fort Vancouver and Hudson’s Bay Company

Euro-American activities in the vicinity of Fort Vancouver began late in 1824 when the Hudson’s Bay Company built the first Fort Vancouver on a bluff to the north and east of the present site. Later, in 1829, Fort Vancouver became the Company’s administrative center and supply depot for the region, and they moved the fort to a location closer to the

Vancouver Barracks - 2001



Data Source:
Provided by Fort Vancouver
Archaeology Office
Layout:
Created by Ralph Delamarter (6/2002) in
consultation with Ward Tonsfeldt

Figure 2 Map of extant buildings in the
West Barracks

Columbia River for convenient access to their wharf. This is the present location of the reconstructed Fort Vancouver National Historic Site.

Activities at the Hudson's Bay Company establishment were founded on trade in furs but grew to include agriculture, lumber manufacture, and a host of productive crafts. The Hudson's Bay Company also provided the rudiments of government and social services. Settlers around the Fort included members of Native American tribes, Hawaiians, Euro-Americans, and Hudson's Bay Company trappers of French and Native American extraction. By all accounts, the resulting mixture of peoples provided the Fort Vancouver community with a diverse and lively character.

During the years between the founding of Fort Vancouver and the middle of the 19th Century, Euro-American population grew in the Oregon country. The Treaty of 1846 between the United States and British governments established the northern boundary of the U.S. at the forty-ninth parallel. This is the present boundary, well to the north of the Columbia River.

With both banks of the Columbia in United States' territory, the importance of Fort Vancouver declined. The Fort remained as a commercial establishment during this period, but it survived only until 1860.

Fort Vancouver and the U.S. Military

After the Treaty of 1846, Congress recognized its responsibility to protect immigrants on the Oregon Trail and settlers in the Willamette Valley. Proposals for military establishments and for regiments of "mounted riflemen" met with favor, and Congress authorized these in 1846. Despite this auspicious start, the military did not arrive in the territory until 1849.

Before the 1880s, the Pacific Northwest was a very remote frontier. Communication and contact with the "real" United States, which was located a continent away on the east coast of the Atlantic, was best accomplished by ship. The journey around Cape Horn or across the isthmus of Panama was several months long and dangerous. The alternative, the overland journey, was much worse, however. Immigrants set out across the continent by wagon each year, but their passage was slow and arduous. The wagon routes were not appropriate for goods or for mail, so these elements of civilization had to reach the Oregon country by sea. Military establishments need supplies, personnel, and reliable communication with a central command. These were not easily available in the Oregon country in 1846.

After Congress's initial action, the Mexican War intervened and diverted troops

and material. Then, as friction between Native Americans and Euro-American settlers increased with the Whitman massacre in 1847, the Army dispatched troops for Oregon in the fall of 1848. They arrived by ship nearly six months later in the spring of 1849. The Secretary of War had selected Fort Vancouver in 1848 as an appropriate location for the first military base. The U.S. military's choice of Vancouver as a site for an Army post reflected several realities of the situation in the Pacific Northwest in 1848.

First, although 25 years had passed since the Hudson's Bay Company first arrived, the great rivers were still the key for access to the interior. Hudson's Bay Company was oriented to river travel. Their selection of a spot near the confluence of the Columbia and Willamette rivers made perfect sense in 1825. Twenty-five years later, the same logic prevailed for the U.S. Army. The Columbia provided an all-weather route through the Cascade mountains for east or west-bound travel. The Columbia Basin to the east of the Cascades was beginning to attract Euro-American settlers by the late 1840s, and also offered a concentration of Native tribes. East of the mountains, the northern or main branch of the Columbia provided access to the northern part of the Columbia Basin as far north as the border with Canada. This branch of the Columbia also provided access east to Spokane and the western slope of the Rockies.

The southern branch of the Columbia is the Snake River, and this provided a route into eastern Oregon and western Idaho. The Willamette River provided access to the settlements in the Willamette Valley and the western slope of the Cascades. Later, the increased use of steam boats on the rivers and improvements at the various rapids made it much more convenient to move troops and supplies throughout the interior.

Vancouver was a deep-water port, and since supplies and troops mostly came into the country by ship, port facilities were important. The Columbia bar made entry to the river uncomfortable, and the river itself was tedious to navigate. Puget Sound offered far superior conditions for shipping, but the Sound had no great river to tap the interior, so Vancouver was a logical choice.

The name Vancouver was applied to the site from its proximity to Point Vancouver, on the Columbia River, slightly upstream from the Hudson's Bay Company fort. The first U.S. Army post at Vancouver was called Camp Vancouver, which became Columbia Barracks in 1850. In 1853, the post was called Fort Vancouver. In 1865, the Army created the Department of the Columbia and in 1867 moved the headquarters of that organization to Portland until 1878. In 1879, the post at Vancouver became Vancouver Barracks, which has remained its most lasting name.

The Army at Vancouver 1850-1880, The Indian Wars

Franz Feinler, an Army Chaplain who wrote an official (and unpublished) history of Vancouver Barracks for the Army in 1911, provides the following summary of the major actions in the 1800s:¹

Table 1 Major Actions for Department of the Columbia, 1850-1900

Year	Action	Specific Dates
1851-1856	Rogue River, Yakima, Klikitat, and Salmon River wars	
1855	Expedition against the Snakes Yakima expedition	May 24-September 8 October 11-November 24
1858	Expedition against the Northern Indians Puget Sound expedition-Spokane, Coeur D'Alene, Palouse troubles	July 17-October 17 August 10-September 23
1859	San Juan Island conflict with British	
1860	Pah-Ute [<i>sic</i>] expedition	April 12-July 9
1865-1868	Indian wars in Southern Oregon, Idaho, Northern California, Nevada	
1872-1873	Modoc war	November 28, 1872-June 1, 1873
1877	Nez Perce war	June 14-October 5
1878	Bannock and Paiute wars	May 30-September 4
1879	Snake or Sheepeater troubles	August-October
1885	Chinese Riots in Seattle	November 7-17
1886	Chinese Riots in Seattle	February 9-August 20
1892	Miner troubles in Idaho	July-November
1895	Bannock Indian troubles	July-August
1899	Miner troubles in Idaho	April 29-October

¹Franz J. Feinler, "Military History of Vancouver Barracks," 1911, Unpubl. MS in National Archives, RG 394, Entry 598, Box 1.

Another writer might interpret “major actions” differently than Feinler, and we might quibble about his distinctions between wars, troubles, and expeditions. Feinler had access to records no longer extant, however, and he had contemporary oral informants as well. Feinler’s chronology confirms that the Indian conflicts were largely over by 1880. Prior to that time, they were the major business of the Army in the Pacific Northwest.

To support its role in the region, the Army needed to build lodging for troops and their commanders, storage space for materials and supplies, and the facilities required to maintain them. In 1850, the U.S. government claimed the area around Fort Vancouver as a military reservation. During the joint occupancy years this area was occupied by both the Army and the Hudson’s Bay Company. After the Company abandoned the Fort in 1860, the Army consolidated the property as the 640 acre Fort Vancouver Military Reservation.

Early maps of the Fort Vancouver Military Reservation show that the Army built to the north of the Hudson’s Bay Company stockade. The map prepared by Joseph Mansfield (1855, fig. 3) is especially useful since it shows the major elements of the Military Reservation in detail. In 1855 the Hudson’s Bay Company still operated the Fort as a trading post and were presumably continuing their other activities, though at a diminished level. On the Columbia River, south and slightly west of the Hudson’s Bay stockade, was the port, with an anchorage for ships, a landing for lighters, and some warehouses. Immediately inland from that, still west of the Fort, was the Kanaka Village area. This was a residential area for HBC employees and their families. Further inland, to the north-west of the Fort was the St. James mission and its cemetery. All of these antedated the Army’s arrival on the site.

The Army built further inland than the Company, and at a slightly higher elevation on the broad plain that extended north of the Columbia. Mansfield’s map shows four distinct concentrations of Army buildings in 1855. Three of these have survived to the present time as building locations on the post. Most conspicuous on the map is Officers’ Row, the line of residences that marks the northern limit of the post. Immediately south of Officers’ Row and across the Parade Ground is the central barracks area for soldiers and the buildings associated with military activities, the magazine, guardhouse, and hospital. This area is the antecedent of the current East Barracks. To the west and slightly north of this central area is the portion of the post that became the West Barracks. Here is another barracks building and the attendant kitchen, mess hall, and privy. Well to the east of the central cluster is another cluster of buildings that occupied what is now the east end of the Parade Ground. This part of the post is no longer used as a building site. In 1855 it included a soldiers’ barracks and the attendant auxiliary structures.

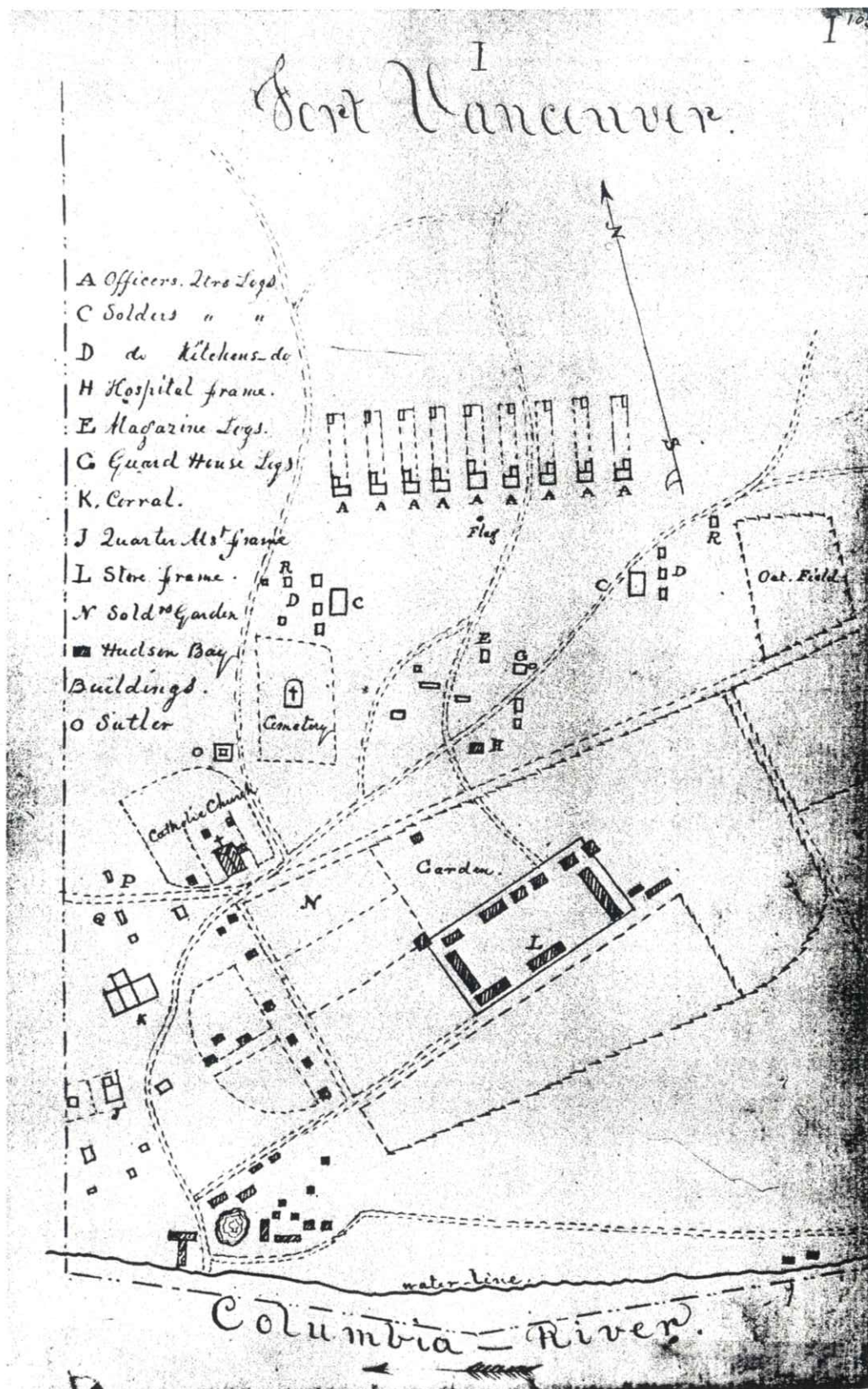


Figure 3 1854 map of Vancouver Military reservation, J.K. Mansfield

Figure 4, an undated photo of the post taken some time before the turn of the 20th century, shows the geographical relations between the Hudson's Bay buildings and the Army buildings. The photographer is positioned above the east end of the Parade Ground looking west and south toward the central cluster, or East Barracks. The seasonal rise of the Columbia has inundated the site of the Hudson's Bay Company fort and the water has risen as high as the area now occupied by Pearson Field. Flooding of this magnitude was not encountered every year, but the higher elevation of the Army post was an obvious advantage when the Columbia did rise to this level.

Vancouver Barracks and Department of the Columbia, 1879-1913

The Department of the Columbia flourished at Vancouver Barracks between 1879 and 1913. This was an Army command that encompassed the territories of the Pacific Northwest. Vancouver Barracks, so named in 1879, was the headquarters of this command. As such, Vancouver Barracks was the premier Army post in the Pacific Northwest. Activities at the Barracks after 1880 changed as the 30-year period of Indian wars came to an end. The garrison was no longer needed to guard settlers in the region. Troops stationed at Vancouver kept the peace in strikes and riots in Seattle and later in Idaho. Most of their activities, however, centered around peacetime military life, including exploration in Alaska, civil engineering work, and training.

The 1880s also saw a significant change in civilian life in the Pacific Northwest. During this decade, three transcontinental railroads reached Portland: the Northern Pacific to the Great Lakes, the Southern Pacific to California, and the Union Pacific to the Midwest. Oregon and Washington were like islands before the railroad, but rail connections ended their reliance on waterborne commerce and transport. Portland was the destination of the three transcontinentals, but lines were soon extended north through Washington to Puget Sound. In 1892, the Great Northern connected directly to Puget Sound from the east, crossing the Cascades at Stevens Pass. The Spokane, Portland, and Seattle Railway began to build from Portland east up the Columbia on the Washington side in 1906. A spur off this line provided direct rail service to Vancouver Barracks.

Transcontinental rail service to the Pacific Northwest meant that transportation between the Northwest states and the rest of the U.S., and Europe beyond, was fast, reliable, and relatively cheap. Commodity goods, especially lumber but also wheat and beef, could be profitably shipped to eastern markets. As a result, the region industrialized and moved from an agrarian economy to one in which industrial production was increasingly important. In the "new" Pacific Northwest after the 1880s, urban problems and industrial problems replaced the old conflicts between Indians and settlers. The Army's responses to the Seattle riots in the mid-1880s and to the Idaho mine strikes and the Industrial Workers of the World (IWW) strikes in the mid-1890s serve as examples.

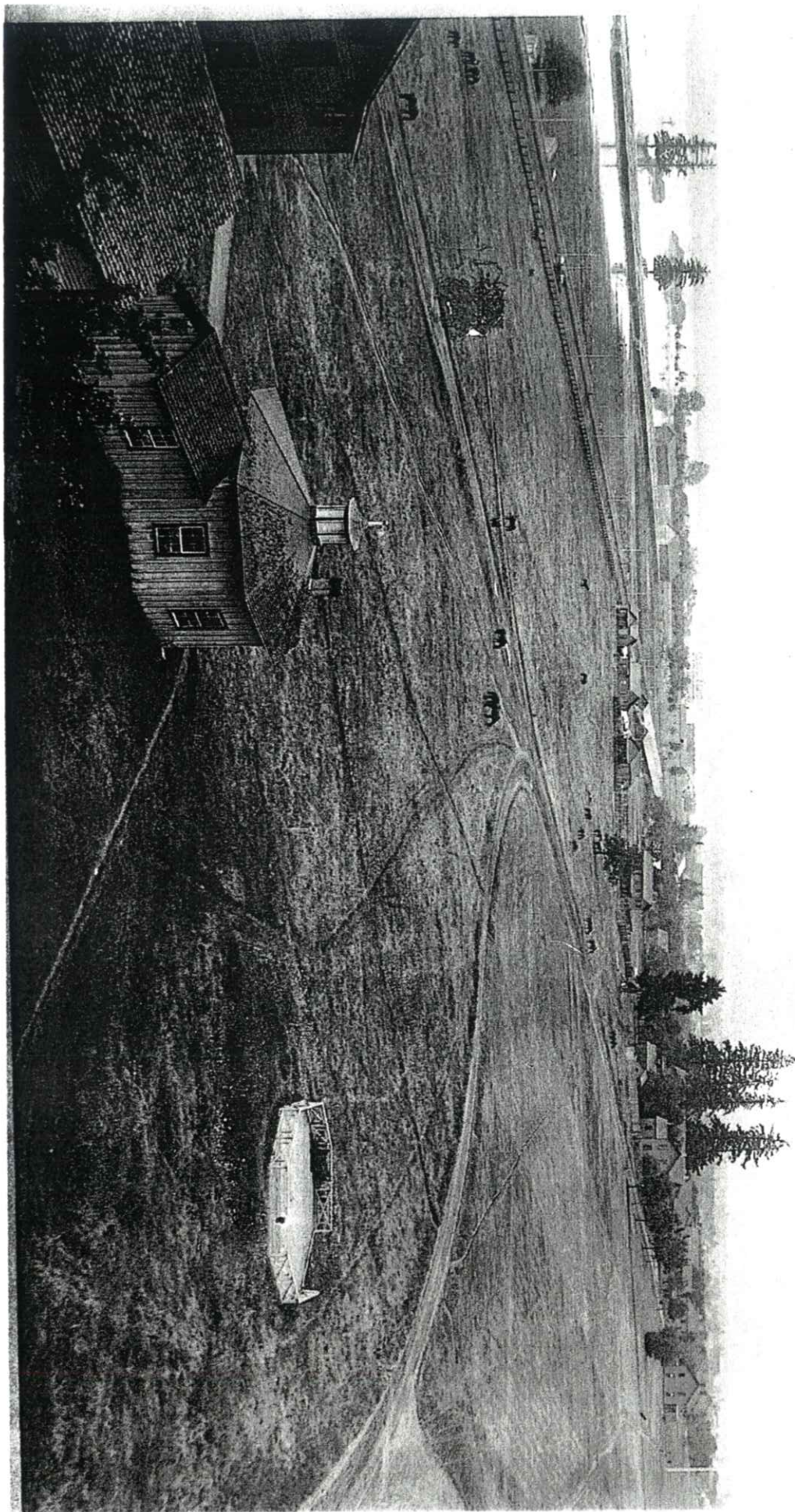


Figure 4 Photo of Vancouver Barracks before 1900 showing flood. Photo from National Archives collection

Transcontinental and local rail service also meant that the factors that had favored Vancouver as the logistic center of the Pacific Northwest were no longer as relevant. The railroads replaced the rivers as the means of transportation and communication around the region. Deep water ports were still necessary, but Puget Sound was now much more attractive than the Columbia. Navigation was easier there, and the dearth of navigable rivers was not a hindrance. In the years after the 1880s, Army posts on Puget Sound, including Fort Worden, Fort Lawton and Camp Lewis proved practical. Finally, in 1913 the Army took official notice of this evolutionary change and dissolved the Department of the Columbia. By this time, Camp Lewis was operating and would become the dominant Army base in the Pacific Northwest. The dissolution of the Department of the Columbia reduced the status of Vancouver Barracks to a subsidiary post under the command of Third Division Headquarters, San Francisco. Later, it would become a subsidiary of Fort Lewis.

Chronology: Vancouver Barracks and the West Barracks, 1880-1913

- | | |
|-----------|--|
| 1879 | Department of Columbia Headquarters relocated from Portland to Fort Vancouver and the post now named Vancouver Barracks |
| 1882-1888 | U.S. Army reorganization; efforts to consolidate activities at fewer Western posts, raise quality of enlistees, improve post facilities across the country |
| | Completion of transcontinental railroad lines throughout the West enables convenient movement of troops and building materials; Northern Pacific Railroad to Portland completed in 1883 |
| 1882 | General Sherman recommends substantial improvements at Vancouver Barracks, and lists the post as one to be retained. During the 1880s many buildings across the post were built or moved; older buildings were demolished. |
| 1884 | Post Hospital completed on western edge of Vancouver Barracks. This marks the beginning of the West Barracks as a part of the Post associated with medical services. |
| 1886 | Fourteenth Infantry begins 14-year stint at Vancouver Barracks; replaces Twenty-First Infantry Regiment, there since 1872 |

- 1887 **Infantry Barracks (607)** constructed at West Barracks
- 1887 **Hospital Steward's Residence (631)** completed at West Barracks; proximity to the Post Hospital determines location in West Barracks.
- "Dead House" or mortuary building constructed at West Barracks near Post Hospital
- 1890s Vancouver Barracks troops assist in quelling incidents of civil unrest in region
- 1892-1898 Nation-wide economic depression; little construction activity
- 1896 X-Ray Equipment developed
- 1898-1899 Spanish American War; Vancouver Barracks serves as mobilization and training center
- 1899 Sweeping reorganization of U.S. Army. Higher standards of professionalism sought. Standard system of architectural design and construction materials for U.S. Army buildings at posts nationwide
- 1901 Twenty-Eighth Regiment created and assigned to Vancouver Barracks
- 1904 New **Post Hospital (614)** and **Double Artillery Barracks (638)** constructed at West Barracks
- 1906-1908 Fourteenth Infantry Regiment returns to Vancouver Barracks
- 1906 Administrative Building/Post Headquarters (991) completed (not in West Barracks)
- 1907 **Hospital Sergeant's Quarters (621)** constructed at West Barracks
- 1910 Former mortuary moved to present location in West Barracks and reopened as **Dental Surgeon's Office (626)**
- 1913 Department of the Columbia abolished. Vancouver Barracks is no longer a frontier post guarding settlers; Post becomes headquarters of the Seventh Brigade, reporting to Third Division Headquarters in San Francisco, California; Twenty-Eighth Regiment continues at Vancouver Barracks.

Building the West Barracks, 1880-1913

The nucleus of what is now called the West Barracks appears on Mansfield's map of 1855 as a barracks and attendant structures immediately north of the Catholic cemetery (see figure 3). Then, during the intervening years until 1870, we have little documentation of building on the post.² The next two decades are better represented with several maps from the 1870s and from the major building period of the 1880s.

The map prepared by Lt. F.K. Ward (Figure 5) in 1874 shows the "Military Reserve at Fort Vancouver" divided into three major parts. The Vancouver Depot is the old Hudson's Bay Company landing on the Columbia River. It includes the wharf, storehouses, and quarters for enlisted men and officers. The area labeled "Fort Vancouver" includes the present Vancouver Barracks, encompassing Officers' Row, West Barracks, Parade Ground, and East Barracks. To the east of the Parade Ground is Vancouver Arsenal, with ordnance stores, quarters, and stables. The old Hudson's Bay stockade does not appear on this map since it was demolished in about 1866.

In the 1870s, when Vancouver Barracks was preparing to assume its position as headquarters of the Department of the Columbia, the West Barracks was a less distinct part of the post than it had been in 1855. In the area of the Fort to the west of the central or East Barracks and to the south of the Parade Ground, the Ward map shows a major stable, with a shed and blacksmith shop nearby. Closer to the East Barracks, but still to the west, are several small buildings, including four designated "Laundress Quarters."

²For detailed history of buildings in the Kanaka Village area, which is to the south of the West Barracks, see J. Steven Aldington, "Building Sequences at the Quartermaster Depot, Vancouver Barracks from 1849 to 1900" in David H. Chance and Jennifer V. Chance, "Kanaka Village/Vancouver Barracks, 1974". Office of Public Archaeology, Institute of Environmental Studies, University of Washington reports on Highway Construction # 3. See also, John Hussey, *History of Fort Vancouver and Its Physical Structure*. (Olympia: Washington State Historical Society, 1957), and Patricia Erigero, *Cultural Landscape Report: Fort Vancouver National Historic Site Vol. II*. (Seattle: National Park Service, Cultural Resources Division, 1992).

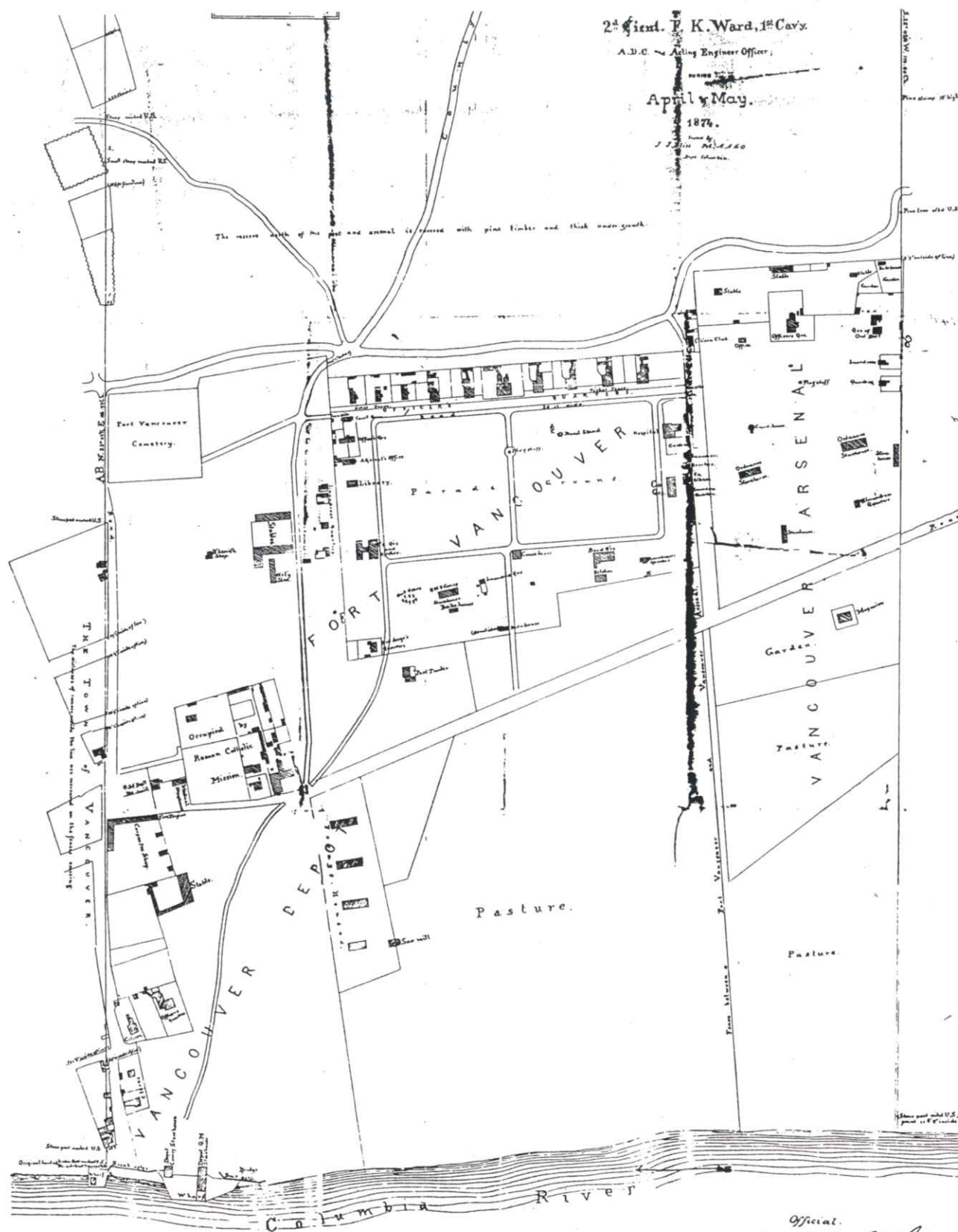


Figure 5 1874 map by F.K. Ward. From Erigero (1992)

Official.
1 Lt H. Clay Wood.
Assistant Adjutant General.

Table 2:
Extant West Barracks Buildings from the Department of the Columbia Period

Building Name	Current Number	Date	Notes
Infantry Barracks	607	1887	Remains on original site; excellent integrity
Hospital Steward's Quarters	631	1887-1888	Moved to present site; substantial structural alterations
Mortuary	626	1888	First location to the north and west of the 1884 hospital
Post Hospital	614	1904	Replaced 1884 hospital. Major re-alignment of building elements in 1952
Double Barracks	638	1904	Remains on original site, excellent integrity
Hospital Sergeant's Quarters	621	1907	Moved to present location; addition to east elevation
Dental Surgery	626	1888/1910	Old Mortuary and another building moved to present location and joined to form Dental Surgery. Substantial changes to footprint and roof line in recent years.

By the end of the 1880s, new major buildings in the West Barracks were three single barracks (of which 607 remains) and the 1884 hospital. New minor buildings included the Hospital Steward's house and the Mortuary. By the end of the 1880s, the West Barracks area looked different than it had a decade earlier. The McCrea map of 1892 (Figure 6) summarizes the picture at the end of the 1880s. The 1884 hospital is a major structure on the post, and it has two new buildings in its orbit.

During the 1890s there is a national depression and Vancouver Barracks sees little building activity. Then, after the turn of the century, two major buildings join the West Barracks group in 1904. These are the new Post Hospital (614) and the Double Barracks (638). The new hospital is much larger than the 1884 hospital. Equipped with an X-ray room, it represents the latest in 19th century medical technology as well as up-to-date

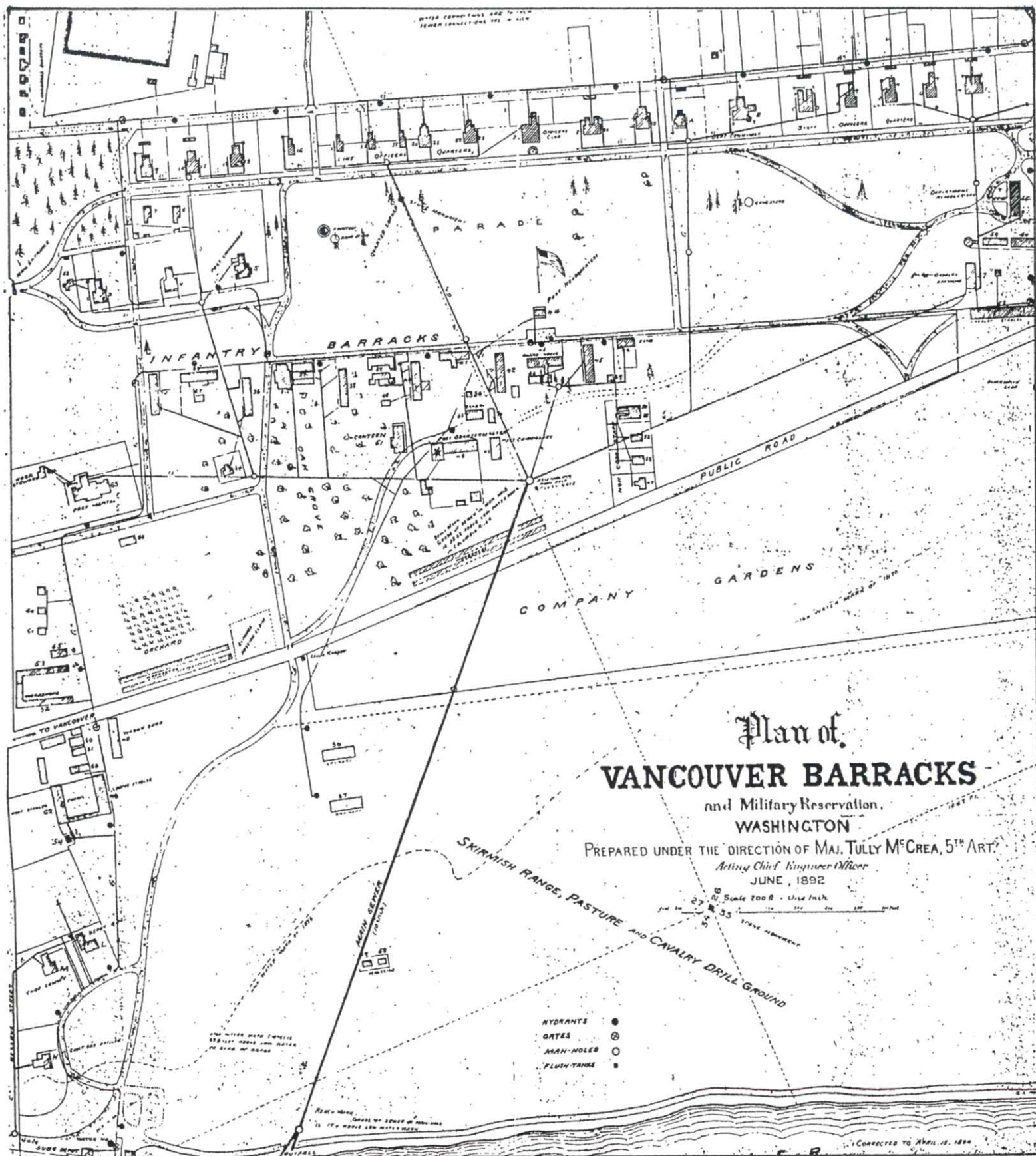


Figure 6 1892 map by Tully McCrea. From National Archives collection

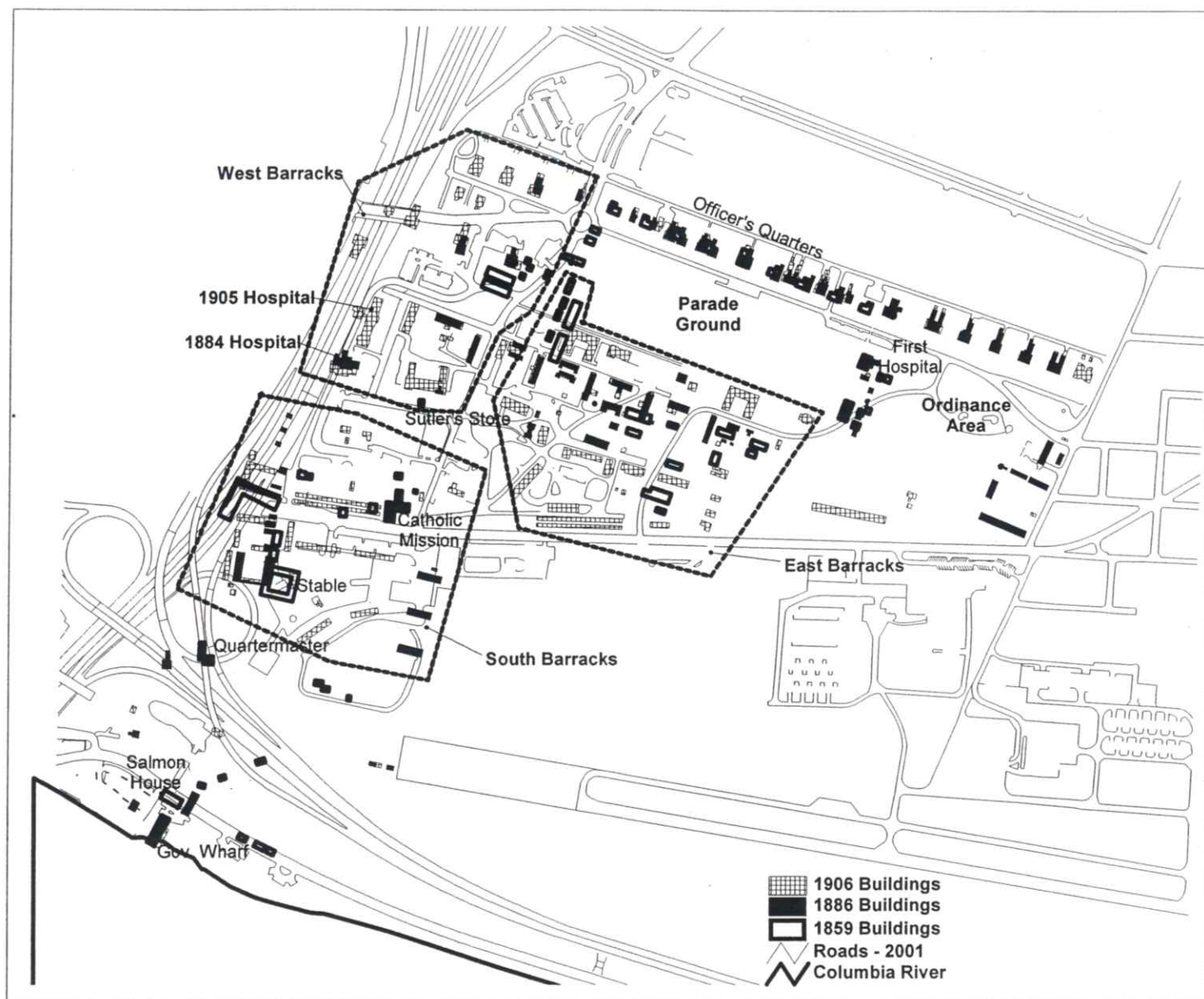
thinking about healthful design and interior appointments. The 1906 map prepared during the tenure of C. H. Martin, Constructing Quartermaster from January of 1906 to December of 1907 (Figure 7), shows the alignment of the 1884 hospital and the 1904 hospital.

Although the new hospital included a dental surgery in its original plans, the need for this facility apparently outgrew the space by 1910. The old mortuary building was moved to a site across from the new hospital to create a new dental surgery. This building has a distinctive T-shaped footprint and intersecting gables, and it is visible on maps and photographs of the West Barracks through the 1930s. The current Dental Clinic building (636) has a rectangular footprint and a single gable. It is a re-working of the older structure from 1952. Figure 8 summarizes 19th century development on the post.



Figure 7 1908 Map of sewer system. From
National Archives collection.

Vancouver Barracks 1859 - 1906



Data Source:
Fort Vancouver Archaeology Office
Layout:
Created by Ralph Delamarter (6/2002) in
consultation with Ward Tonsfeldt

Figure 8 Summary map of 19th century
building projects.

Chronology : Vancouver Barracks and the West Barracks, 1914-1946

- 1914 Camp Lewis established near Tacoma, Washington, on Puget Sound. The post soon moves into position as foremost Army installation in Pacific Northwest
- 1914 Mess Hall (628) and Quartermaster's Storehouse (630) constructed at West Barracks
- 1917-1918 World War I
- 1918-1919 Spruce Production Division at Vancouver Barracks; Spruce Production soldiers headquartered at Barracks but stationed in squadrons in logging camps and lumber mills throughout Washington and Oregon. Spruce Production builds re-manufacturing plant and many temporary buildings.
- 1918 Influenza epidemic; Ill soldiers crowd Post Hospital and temporary buildings at Vancouver Barracks
- 1918 Post-War demobilization begins
- 1918 American Red Cross builds Convalescent House (636) at West Barracks; Building dedicated February, 1919.
- 1920s Seventh Infantry at Vancouver Barracks
- 1920-1926 Slowed military activity; little new U.S. Army construction nationwide
- 1926 Initiation of the "Ten-Year Plan" for built improvements at U.S. Army posts across the country; little new construction at Vancouver Barracks during the decade, activities centered on remodeling and maintenance
- 1929 Stock Market decline; beginning of Great Depression
- 1930s Seventh Infantry continues at Vancouver Barracks
- 1933 Establishment of Civilian Conservation Corps (CCC) as part of "New Deal"; others include the Public Works Administration and Works Progress Administration programs

- 1933-1941 Civilian Conservation Corps headquarters for Oregon and Washington established at Vancouver Barracks. Medical complex in West Barracks provides services for CCC enrollees throughout region
- 1934 Red Cross Convalescent House remodeled as Service Club Center
- 1930s Post Hospital porches enclosed and other improvements completed
- 1936 Post Hospital north porch enclosed
- 1939 Construction of treatment and examination rooms as well as others in Post Hospital basement
- 1937-1938 Works Progress Administration builds seven duplexes at West Barracks; other improvements made to buildings and grounds throughout the Post.
- 1941 Barnes Hospital built as Veterans Administration hospital, serves as military hospital during WW II
- 1941-1945 U.S. enters World War II; Vancouver Barracks again serves as a mobilization and training center
- 1946 Vancouver Barracks declared "surplus" by the Army and slated for disposal. Last-minute reprieve reactivates the post as center for Reserve Army training and home of the 104th Division (reserves)
- Veteran's Administration takes over at Barnes Hospital
- 1952 I-5 construction begins; several buildings in West Barracks moved to new locations including rear wing of Post Hospital, the Steward's Quarters, and the Hospital Sergeant's quarters.

Vancouver Barracks in World War I, the Great Depression, and World War II

The Army dissolved the Department of the Columbia and relegated Vancouver Barracks to second-rate status in 1914, but the old post continued to be relevant to life in the Pacific Northwest, and to serve the region in new and unexpected ways. By the time the U.S. declared war on Germany on April 6, 1917, the war had been raging for nearly three years and was at a stalemate in the trenches of France. The Army's first mission was to provide fresh troops and materials to the Allies. A new Infantry regiment, the 44th, and a new Engineering regiment, the 4th, were organized at Vancouver Barracks, trained, and then sent to other bases for deployment in Europe. This increase in personnel required new barracks, but these were temporary buildings or "cantonments" that would not survive long beyond the war.³

In the fall of 1917, the Army established the Spruce Production Division under the command of Col. Brice P. Disque. This organization was officially a part of the Signal Corps, which was in charge of Army air craft and matters aeronautical. The Army had concluded that the airplane was a weapon that could be used to break the "stalemate in the trenches" by aerial bombing and strafing. Airplanes needed to be built in greater numbers if they were to be effective, however, and that required additional materials. The key material in aircraft construction was Sitka spruce, which was available only in coastal forests of Oregon, Washington, British Columbia, and Alaska.

For a combination of reasons including the business and political climates in the Pacific Northwest, the Army was not confident that the lumber companies could produce enough spruce lumber of high enough quality to meet the need for Allied aircraft. The lumber manufacturers were themselves less than enthusiastic about producing spruce lumber. Even though the prices were high, building railroads to reach the spruce stands would strain their reserves of capital. Worse, the lumber industry was facing a labor shortage as loggers and mill workers joined the military or found more remunerative work in other war-related industries. So, the Army created the Spruce Production Division to supply soldiers as workers in logging camps and saw mills, and to build the infrastructure of logging railroads and re-manufacturing mills that would get spruce to the aircraft plants in Europe.

³Ted Van Arsdol, "World War I Brought Boom Times to the Vancouver Area," *Clark County History*, (vol. 17, 1976) p. 3-87.

The Spruce Production Division (SPD) grew to 30,000 troops all headquartered at Vancouver Barracks. They were deployed as "squadrons" of soldiers in logging camps and lumber mills throughout the region, but their administration, supply, and medical services came from Vancouver. The Spruce Production Division built and operated twelve logging railroads. The SPD also built and operated two saw mills with a combined capacity of over 2 million board feet of lumber per day. This was a very large capacity. One of the mills was built at Vancouver Barracks, at the site of the old Hudson's Bay Company stockade.

After the War ended in 1918, the mill and the temporary buildings were eventually dismantled, and Vancouver Barracks returned to a state of somnolence for the 1920s. Activities on the post included training for Army Reserves and the establishment of what was to become Pearson Field. Then, at the end of the decade, the Great Depression re-activated life on the post. Two of the New Deal social programs were important for Vancouver Barracks. These were the Civilian Conservation Corps or CCC and the Works Progress Administration or WPA.

The Civilian Conservation Corps was established in 1933 as a federal program to enlist young men whose families were on relief. The men were assembled on Army bases throughout the U.S., trained, and sent out to work on public land projects. These lands included National Forests, National Parks, Taylor Act grazing lands, and Oregon and California railroad lands administered by the Department of the Interior. There was also a separate branch of the CCC that enrolled Native Americans and did projects on Indian Reservations. Because a disproportionate amount of the public land in the U.S. is in the Western states, this region was the destination of many CCC enrollees. The CCC was a civilian organization, as the name announces, but it had a military or at least para-military character. The young men lived in barracks, wore uniforms, and worked under military discipline. They were commanded by Army officers and personnel from the host agencies, such as the Forest Service. The young men earned a modest stipend, most of which was sent to their families.

It is generally recognized that the CCC was the largest mobilization of Americans prior to World War II.⁴ The relation between the CCC and the Army came about because in 1933 the Army was the only organization that was prepared to enlist the hundreds of thousands of CCC recruits. These young men needed transport, lodging, clothing, food, medical evaluation, training, and supervision. No other organization was prepared to take on a task of this magnitude.

Vancouver Barracks served as an enrollment center and as an administrative center for the CCC. The medical and dental facilities in the West Barracks served all of the 2000

⁴John A Salmond, *The Civilian Conservation Corps: a New Deal Case Study*. (Durham: Duke University Press, 1967).

to 5000 men in the CCC camps of northern Oregon and southern Washington. During the life of the program, from 1933 to 1942, an estimated 40,000 CCC men worked in the area administered by the Vancouver Barracks District. The CCC built 67 work camps in the district, 20-30 of which were operating at any specific time.⁵

Although the two organizations had nothing in common, there was a striking similarity between the SPD and CCC in relation to Vancouver Barracks. In both cases the Barracks provided the administrative and logistic support for isolated groups of men working in the forests of Oregon and Washington. Transportation arrangements, movement of supplies, health care, and payrolls all originated from Vancouver and needed to arrive at 20 or 30 remote camps in the woods.

In 1942, the Government ended the CCC, releasing the enrollees for military service and the officers for active duty. Vancouver Barracks resumed its role as a war-time post, but most of the training and induction services were shifted to Fort Lewis. During World War II, Vancouver Barracks was used as a training site for some specialized units, and as a part of the Portland Sub-port of Embarkation, where troops were assembled prior to shipping overseas.

Building the West Barracks, 1914-1946

After the Department of the Columbia was discontinued in 1913, the Army's building program at Vancouver Barracks concentrated on temporary buildings erected *ad hoc* for various programs and subsequently dismantled. Two of the four permanent West Barracks buildings constructed during these years were built not by the Army, but by other agencies. These were the Red Cross Convalescent Center (636) built by the Red Cross in 1919, and the seven Non-Commissioned Officer's Duplexes (632, 641, 642, 643, 644, 664, 665) built by the Works Progress Administration (WPA) in 1939. Minor buildings in this period include the Mess Hall (and kitchen) (628) built in 1914, and the Quartermaster's Storehouse (630) built in the same year. The three multi-car garages that accompany the duplexes (602, 676, 673) were built in 1982.

⁵Vancouver Barracks 9th Corps Area Civilian Conservation Corps, *1937 Official Annual*. (Baton Rouge: Direct Advertising Co., 1938) p. 30.

Themes for Interpreting the West Barracks

The extant buildings in the West Barracks date from 1887, the Infantry Barracks, to 1939, the Non-Commissioned Officers' Duplexes. The first theme is the Department of the Columbia (1879-1913) and its activities. The Infantry Barracks and the other major buildings including the Artillery Barracks and the Post Hospital were built during this period for the Department of the Columbia. The second theme for the West Barracks is the medical services theme, which encompasses the 1905 Post Hospital and the other medical services buildings. The third theme is the Spruce Production Division theme, which was a very large undertaking for Vancouver Barracks. The SPD did not leave any permanent buildings in the West Barracks group, but did employ the medical services complex on the post in a major effort, perhaps the largest military medical effort in the West during the World War I period. Similarly, the Civilian Conservation Corps was a large piece of Vancouver Barracks history in the post-Department of the Columbia years. Again, the West Barracks medical complex was employed by the CCC.

THEME I: THE GARRISON AT VANCOUVER BARRACKS, 1880-1910

The term “garrison” refers to troops stationed at a specific place for service or defense. During the early decades of U.S. Army presence at Vancouver, the troops stationed there were a garrison in the full sense of providing defense for Euro-American settlers and immigrants gathering in the Willamette Valley and other Oregon locales. During the Civil War period, volunteer and militia troops served as the garrison since regular Army units were employed elsewhere. Then, in the 1870s, the Army returned for an unhappy decade of Indian wars.

Finally, in the 1880s, the post at Vancouver entered a period of relative maturity. A major administrative unit, the Department of the Columbia, was headquartered on the post. Troops stationed at Vancouver, especially the 14th Infantry, formed the garrison and participated in the life of the community. They marched in parades in Portland and Vancouver. Senior officers from other commands rotated through Vancouver Barracks, and brought with them the flavor of the Army as an important institution in American life.

The work of defending the populace changed during these years from defense against Native American tribes to defense against domestic “troubles” that included anti-Chinese rioters, anarchists and radical labor groups, exuberant gold miners in Alaska, and striking railroad workers. At the end of the period, the Army’s attention was turning from domestic troubles to actions in foreign countries, including the Spanish-American War, the Philippine Insurrection, the Boxer Rebellion, and the Mexican border conflicts. Troops from Vancouver Barracks participated in all these conflicts.

With the change in emphasis from domestic defense to actions abroad, the role of the Army changed, and the old garrison system was called into question. The Army’s domestic Departments were a thing of the past, and they were eliminated one-by-one until the Department of the Columbia, one of the last, was eliminated in 1913.

Units at Vancouver Barracks During the Department of the Columbia Period, 1880-1910

Table 3: Units at Vancouver Barracks 1880-1910⁶

Unit	Arrive	Depart
21 st Infantry	January 30, 1872	June 25, 1884
1 st Artillery	September 20, 1882	January 25, 1889
14 th Infantry	July 6, 1884	May 21, 1898
2 nd Cavalry, F Company	April 19, 1889	October 17, 1889
4 th Cavalry, E Company	June 14, 1890	June 4, 1898
1 st Washington Volunteers	May 25, 1898	July 23, 1898
Oregon Volunteers, Light Battery A	July 9, 1898	October 15, 1898
Independent Battery, Washington Volunteers	July 21, 1898	October 23, 1898
8 th California Infantry	September 16, 1898	January 31, 1898
24 th Infantry	April 3, 1898	May 16, 1900
35 th Infantry	July 15, 1899	October 3, 1899
39 th Infantry	September 10, 1899	November 2, 1899
45 th Infantry	September 16, 1899	November 2, 1899
7 th Infantry	May 17, 1900	May 6, 1903
28 th Infantry	March 18, 1901	November 12, 1901
Convalescent Company 3	March 22, 1901	October 1901
8 th Battery, F Artillery	August 4, 1901	January 6, 1905
26 th Battery, F Artillery	September 3, 1901	December 24, 1904

⁶Data from War Department, *Report of the Secretary of War*, var. dates 1880-1910, (Washington DC: US GPO); Feinler, p. 103-104; Ted Van Arsdol, *Northwest Bastion: the U.S. Army Barracks at Vancouver, Washington, 1849-1916*. (Vancouver: Heritage Trust, 1991).

17 th Infantry	April 7, 1902	June 24, 1903
19 th Infantry	June 15, 1903	April 1, 1905
17 th Battery, F Artillery	March 20, 1905	October, 1906
18 th Battery, F Artillery	March 20, 1905	October, 1906
14 th Infantry	April 24, 1905	January 2, 1908
27 th Battery, F Artillery	April 12, 1907	May 2, 1907
28 th Battery, F Artillery	April 16, 1907	May, 1907
4 th Field Artillery, Companies A and B	June, 1907	December 10, 1908
Engineers B	May 30, 1980	May 1, 1909
1 st Infantry	April 30, 1909	April 1, 1911
Engineers F	April 30, 1909	April 1, 1911
2 nd Field Artillery, Companies A and B	December 9, 1909	March 2, 1911
2 nd Field Artillery, Company D	August 14, 1910	April 1, 1911

Actions and Commanders, 1880-1910

On October 13, 1879, former President Ulysses S. Grant visited Vancouver Barracks. He had been stationed there in the 1850s, before his success as a Union General and his subsequent presidency. Four companies of the 21st Infantry and the Regimental Band were drawn up in formation when Grant disembarked from the steamboat *St. Paul* at the Vancouver Depot wharf. General O. O. Howard, commander of the Department of the Columbia, and Colonel Morrow, Commander of the 21st Infantry, greeted the former President with full military ceremony.

Grant's visit came at a propitious time for Vancouver Barracks. General Howard assumed command of the Department of the Columbia in Portland, but he brought his command across the river to Vancouver in 1879. The post got its new and final name in that year. Plans for more and better buildings were announced. The old log barracks and houses built in the 1850s were rotting out, and they would later be replaced with stylish frame structures. Vancouver Barracks was making the transition from a frontier post to a more settled and sophisticated military establishment.

The 21st Infantry had been headquartered at Vancouver Barracks, then called Fort Vancouver, since July of 1872. During the 1870s, the 21st had seen major actions against the Modocs and the Nez Perce. More recently, there had been "troubles" with the Bannock, Paiute, and Sheepeater tribes. Some members of these groups were still detained at Vancouver in 1879, and Sarah Winnemucca, the prominent Paiute leader, was at the Barracks interpreting and teaching sewing classes to the Indian women.⁷

In 1880, the building program at Vancouver Barracks gathered steam with new officers' quarters for the Department of the Columbia staff. The comfort of the enlisted men also improved in 1880, as Colonel Morrow and two captains from his staff organized the first official canteen. This facility provided a place for soldiers to buy refreshments and relax in a more wholesome atmosphere than the Vancouver taverns. At the end of the year, General Howard left to assume command of the Academy at West Point. The new District Commander, General Nelson Miles, arrived in the next year and increased the garrison with another company of the 21st, bringing the total to five companies. General William T. Sherman, Commanding General of the Army, identified Vancouver Barracks as one of the western posts to be retained, and budgeted \$50,000 for improvements. In 1883 the building program continued with relocations of several old buildings and construction

⁷Gen. O. O. Howard, *My Life and Experiences Among the Hostile Indians*, (Hartford: Worthington, 1907) p. 431.

of a new hospital in the West Barracks area.

Then in 1884 the 21st was ordered to Fort Sidney, Nebraska. The regiment replacing the 21st was the 14th Infantry.⁸ This regiment had been stationed at Vancouver at the end of the Civil War, in 1865-1866. The 14th would spend 14 years at Vancouver, from 1884 to 1898, then return from 1906 to 1908. Colonel L.C. Hunt was commander of the 14th on its arrival at Vancouver. He was succeeded in 1886 by Col. Thomas M. Anderson. Eight of the ten companies in the 14th were stationed at Vancouver. These were companies B, C, D, E, F, G, H, and K. Companies A and I were at Fort Townsend, Washington.

During the 1880s, the Department of the Columbia was quiet. For the troops, garrison duty included training, some construction projects on roads and telegraph systems, and the occasional parade or ceremony in Portland. The officers were similarly employed, with the occasional opportunity for explorations in Alaska. Parties from Vancouver Barracks explored the Yukon River in 1883 and the Copper River in 1885. Many commentators mention the active social calendar that the officers arranged for themselves. The troops apparently enjoyed their canteen, what social outlets Vancouver offered, and amateur theatrical productions.⁹

In 1885, Brigadier General John Gibbon assumed command of the Department of the Columbia, succeeding General Nelson Miles. At that time, there were 580 men stationed at the Barracks. In the fall of that year, all 10 Companies of the 14th were sent by rail to Seattle to protect Chinese immigrants from hostile crowds who were protesting the importation of Asian workers. Although one confrontation between the troops and the crowds resulted in wounding five anti-Chinese demonstrators, the situation was generally tense but calm and had settled down completely by the spring of 1886. Gibbon's command ended in 1890. General A. V. Kautz succeeded him. Colonel Thomas Anderson assumed command of the 14th Infantry in 1886, and continued in that position until his retirement in 1900.

⁸For a regimental history of the 14th, see Capt. L. S. Sorley, *History of the Fourteenth United States Infantry*, (Chicago, 1914). For the 14th at Vancouver Barracks, see Ted Van Arsdol, "The Famed Fourteenth, Vancouver's Favorite, Part I," *Clark County History* (vol 7, 1971) p.73-106; "The Famed Fourteenth, Vancouver's Favorite, Part II," *Clark County History* (vol. 8, 1972) p. 191-226.

⁹Van Arsdol, p.57ff.

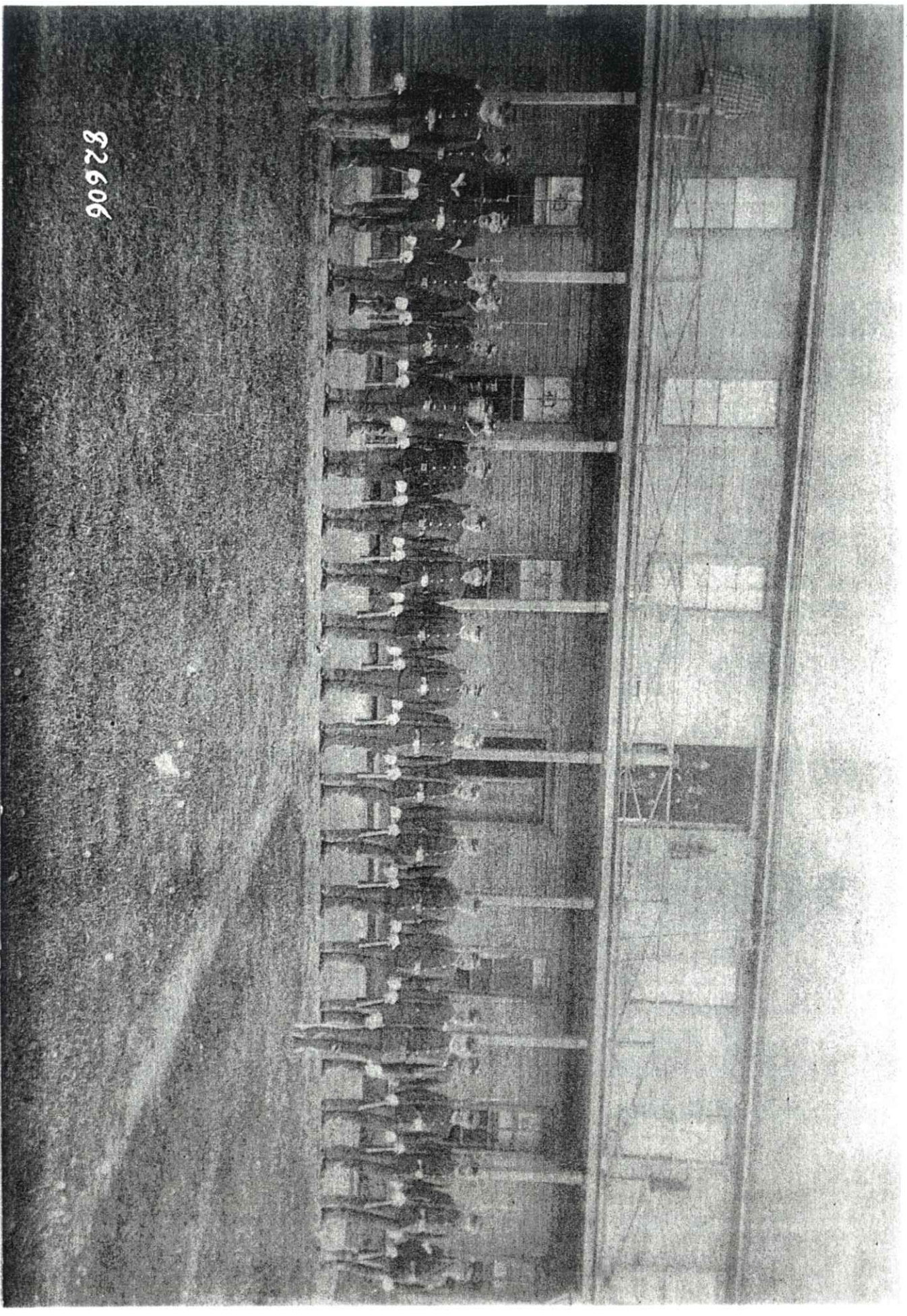


Figure 9 Photo of a Company of the 14th
Infantry Regiment. National Archives
collection

The next major action for the troops was another civil confrontation in the late spring of 1892. President Benjamin Harrison ordered out the troops to protect lives and property in the Coeur d'Alene mining area of Idaho. On July 13, Companies B, C, D, E, and F left for Wardner, Idaho, to "assist civil authorities during miner troubles."¹⁰ The Western Federation of Miners was organizing. Within its ranks were members of radical groups, including anarchists and the nucleus of the Industrial Workers of the World or IWW. The Idaho situation was literally explosive, as the miners and their associates employed dynamite to sabotage industrial installations including some mines. Governor Frank Stunenburg himself fell victim to a dynamite blast. Martial law prevailed in the mining region until November of 1892.

General Kautz retired in 1892. General William P. Carlin, who retired in 1893, succeeded Kautz. General E. S. Otis assumed command of the Department of the Columbia in January of 1894. On May 12 of that year, Companies A, B, C, E, and G of the 14th were ordered to Seattle on another civil disturbance mission. This time, a group known as the Industrial Army or the Coxey Army was organizing workers who were suffering from the economic effects of the early 1890s depression. Coxey Army groups were notorious for stealing (or at least threatening to steal) railroad trains. This was a great threat at the time, since trains were beginning to make themselves indispensable throughout much of the west. In their deployment to Seattle, for example, the 14th traveled by steamboat 18 miles down the Columbia from the Barracks to Kalama, Washington. There, they caught a Northern Pacific train for Seattle. The five Companies made their way back to Vancouver on the Northern Pacific by way of Wallace, Idaho, and Umatilla Junction, completing a large loop through the inland Northwest by rail.

Just as the situation in Seattle was sorting itself out, another threat to the railroads came from another labor issue. This was the nationwide Pullman Strike of 1894. The Pullman Company workers struck in Chicago, and railroad workers on the Northern Pacific struck in sympathy. Again, a threat to the rail network was a threat to the economy and communications on the country. Companies A, B, D, and E, as well as the Headquarters staff left again for Tacoma, then continued east to Ellensburg by rail. In the meantime, Company G was still in the field from the last emergency, having been sent to guard the Snake River railroad bridge from threats by the Coxey Army. They traveled by rail to Spokane, then on to Tacoma to join the other Companies of the 14th. All the 14th was back on post at Vancouver by July 30. General Otis reported that the troops encountered little resistance from the strikers, although "a few rifle shots passed their proximity" and "a few bridges were destroyed."¹¹

¹⁰Feinler, p. 97.

¹¹*Report of the Secretary of War, 1894* Vol. I, (Washington DC: US GPO, 1894) p. 156.

The next two years passed quietly, but the troop movement logs show numerous ambitious training exercises around the region. Then in February of 1898 the 14th was ordered to Alaska to bring stability to the gold rush communities of Skagway and Dyea. A detachment of troops from the 14th left by steamship on February 5. Companies A and G followed on February 15, and Companies B and H followed on February 25. Colonel Anderson established Headquarters at Dyea. The 14th kept the peace in Skagway and Dyea, and also participated in a boundary dispute with the British and Canadians over the Lynn Canal district.¹²

In May, General Henry C. Merriam ordered Colonel Anderson to bring his troops back to Vancouver to prepare for the war with Spain. Colonel Anderson and Companies A and G returned to Vancouver later in May. Anderson was promoted to Brigadier General. Companies B and H remained in Alaska. Companies A, C, D, E, F and G then sailed with Oregon and California Volunteers for San Francisco and deployment to Cuba.

As Vancouver Barracks was stripped of regular soldiers, volunteers from numerous organizations took over the post. Major General William Schafer took over the Departments of the Columbia and of California after General Merriam was transferred to the Department of Colorado.

In 1899 troops gathered at Vancouver Barracks for shipment to the Philippines. During the next two years, Washington, Oregon, and California Volunteers were stationed at Vancouver barracks briefly, while en route to other places. Infantry regiments stopping in Vancouver for periods of one or two years included the 24th, 35th, 39th, 45th, 7th, 28th, 17th, 19th, 14th. There were also several Artillery units, and Engineering units. As a result, the population of the post grew from the 400-600 range of the 1880s to 1000-1700 men. There were not enough barracks, and many men were living in tents.

General Randall assumed command of the Department of the Columbia in 1901 and set about improving the facilities at Vancouver Barracks. This included an ambitious building program that would enable the post to house a full regiment of Infantry and two batteries of Artillery. This would require five new sets of double barracks, 15 sets of officers' quarters, a new hospital, and other service structures. This building program produced the five sets of distinctive double barracks and the brick Post Hospital that mark Vancouver Barracks today. In 1903, General Randall left for the Philippines and General Frederick Funston took command of the Department of the Columbia.

In the spring of 1905, the 14th Infantry returned to Vancouver Barracks. This unit had served with distinction since leaving Vancouver in 1898. They had left Vancouver for service in the Philippines, and then they have been stationed in China during the Boxer Rebellion. Soon after they arrived back in the 'States, they participated in the festivities

¹²Sorley, p.9.

associated with Portland's Lewis and Clark centennial in the summer of 1905. Their arrival was a positive change from the rapid turnover of units and commanders that had prevailed at Vancouver since the Spanish-American War. General Frederick Funston departed for Colorado, and General Constant Williams replaced him as commander of the Department of the Columbia in 1906. That year also saw a new commander for Vancouver Barracks, General Steven Perry Jocelyn, who had been with the 21st Infantry at Vancouver during the Indian wars of the 1870s and later with the 14th.

In 1908, the 14th departed for another tour in the Philippines. In their wake, the 1st Infantry arrived for a three-year stay. By 1910, the situation at Vancouver Barracks was changing at a rapid pace. There was not adequate room on the post for training activities or maneuvers. Worse, there was no firing range large enough for newer weapons. The artillery units were especially frustrated. Units from Vancouver were frequently sent to various other posts for "camps of instruction," as the Army termed its training exercises. American Lake, near Tacoma, was the site of many of these. In later years, this area would become Camp Lewis, and the Fort Lewis. The Department of the Columbia held summer maneuvers there. The Department also leased and later purchased land Vancouver in eastern Clark County for a firing range called Camp Bonneville.

By 1910, the Army was moving away from the Department structure that had secured Vancouver Barracks a place as an administrative post. Departments were being phased out, and The Department of the Columbia was stretched to include Alaska and Montana in addition to Oregon, Washington, and Idaho in its charge. In 1913, the Department of the Columbia was itself abolished, and the garrison period at Vancouver Barracks was at an end.

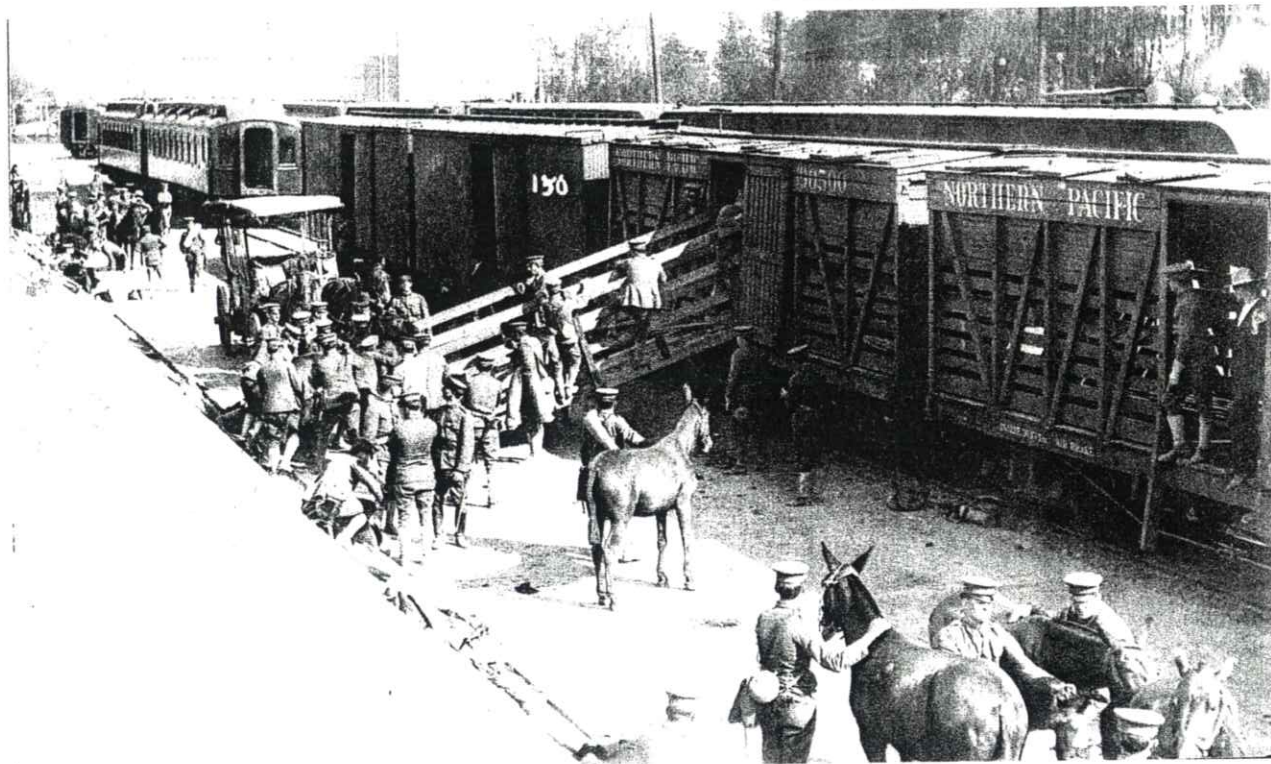


Figure 10 Troops loading mounts onto a Northern Pacific train, ca. 1909. Railroads ended the Army's reliance on water transportation in the Northwest.

Troop Movements, 1880-1910

The following data is taken from Feindler's "Military History of Vancouver Barracks." Feindler's account offers specific details about the movement of troops and units through the Barracks. We have preserved Feindler's system of abbreviation and his orthography.

Table 4: Troops Arriving at Vancouver Barracks, 1879-1910

DATE	COMPANY OR UNIT	REGIMENT	FROM
1879			
Feb. 5,	Recruits	21 inf.	
Jul. 29,	I	" "	
Sep. 2,	Recruits 1 cav. &	" "	
Sep. 17,	C	" "	Camp Winfield Scott.
Oct. 23,	E	" "	
Nov. 11,	Recruits	2 "	
Nov. 11,	"	21 "	
1880			
May. 4,	GK (CE)	21 inf.	Presidio.
Jun. 17,	F	" "	Fort Stevens.
Oct. 15,	C	" "	
1881			
Sep. 16,	H	21 inf.	Presidio.
Nov. 9,	Recruits 2 inf. &	" "	"
Nov. 28,	Det.	" "	
1892			
Mch. 22,	Recruits 2 inf. &	21 inf.	
Mch. 25,	"	1 cav,	
Sep. 20,	E light Battery.	1 art,	
Oct. 4	Recruits	2 inf,	
Oct. 4,	"	1 art,	
Oct. 4,	"	21 inf,	
Oct. 9,	"	1 cav,	
Nov. 2,	I	21 inf,	
Dec. 8,	K	" "	
1883			
Jun. 26,	G	21 inf.	Field.
Aug. 27,	H	" "	"
Sep. 9,	E	" "	Fort Canby.
1884			
Jul. 6,	F S & Bd. AEIK	14 inf.	Fort Sidney.
Jul. 31,	DFG	" "	Fort Uncomahgre, Col.
Jul. 31,	Recruits	" "	
Oct. 26,	H	" "	Fort Klamath
1885			
Apr. 30,	BG	14 inf,	Fort Townsend
Nov. 10,	EFGK	" "	Seattle by "Lurline"

Nov. 17, 1886	ABCDHI	" "	" " "Newill"
Feb. 25, Aug. 20, 1888	CDFI GK	14 inf, " "	Seattle by "Newill" "
Feb. 17, 1889	Recruits	14 inf,	Columb U.S. Barracks
Mch. 30, Apr. 19, Apr. 22, Apr. 25, Aug. 17, 1890	Recruits F Recruits " K	14 inf, 2 cav. 14 inf, " " " "	Walla Walla Columbus Barracks David's Island Fort Klamath
Jun. 14, 1892	E	4 cav,	Fort Lovell
Nov. 9, 1894	A	14 inf,	Fort Townsend
Oct. 9 , 1895	H	14 inf,	Leavenworth
Mch. 6, 1898	F	14 inf,	Fort Townsend
May. 18, May. 25, Jul. 9, Jul. 21, Sep. 16, Oct. 24, 1899	Hdqrs. AG Hdqrs. CHKM Alight Battery F & S ABCD DGIH Det.	14 inf, 1 W. inf, Ore. Vols Independent Batt. Wash. Vols. 8 Cal. Vols, 14 inf,	Lynn Canal Tacoma Alaska
Feb. 9, Apr. 3, May. 15, May. 5, May. 24, May. 24, Jul. 15, Sep. 10, Sep. 16, 1900	Recruits B Det. L B H Regiment " "	24 inf " " " " 14 inf, 14 inf, 35 inf Vols. 39 " " 45 " "	Ft. Douglas Wardner, Id Presidio Dyca, Alaska Wrangle Being organized " "
May. 16, May. 17, 1901	H (A) Hdqrs. F S & Bd. CH(BIK)	7 inf, " "	Fort Bady. "
Mch. 18, Mch. 21, Mch. 22, May. 1,	Hdqrs. F & S E Convalescent Company No. 3, F	26 inf, " " 28 inf,	Being Organized. " " Presidio. Being Organized.

May. 8,	G	" "	" "
May. 13,	H	" "	" "
Jun. 10,	A	" "	" "
Jun. 17,	B	" "	" "
Jun. 20,	C	" "	" "
Jun. 21,	D	" "	" "
Jun. 29,	IKL	" "	" "
Jul. 9,	M	28 inf,	Being Organized.
Aug. 4,	8 Field Battery	art,	" "
Sep. 3,	26 " "	"	" "
Sep. 9,	(ABC)	7 inf,	St. Michaels, Alaska.
Sep. 17,	Det. Convalescent Company No. 3,		Boise.
Sep. 19,	Recruits	F art,	Columbus.
Sep. 19,	"	86 inf,	"
Sep. 30,	(FL)	7 "	Alaska.
1902			
Apr. 7,	F S & Bd. EFGH	17 inf,	Presidio.
Apr. 28,	Recruits	" "	"
Jul. 6,	26 Field Battery	Art,	Camp Willians.
Aug. 1,	ACD	17 inf,	Presidio.
Aug. 24,	Recruits		"
Aug. 28,	8 Field Battery	Art,	Camp Weisenberger.
Aug. 31,	26 " "	"	" Dyer.
Sep. 2,	B	17 inf,	Fort Lawton.
Dec. 15,	Recruits	" "	Presidio.
1903			
Jan. 19,	Recruits	17 inf,	Presidio.
Mch. 12,	"	" "	"
Mch. 23,	"	" "	"
Mch. 26,	"	Coast & F art,	"
Jun. 20,	Recruits	C Art,	San Francisco.
Jun. 23,	F S & Bd. ABCD	19 inf,	
Jul. 16,	(F S & Bd.) EFGH	19 inf,	San Francisco.
Jul. 21,	ABCD	" "	Camp Nesqually.
Jul. 27,	8 Field Battery	Art,	American Lake.
Jul. 28,	26 " "	" "	" "
1904			
Jun. 23,	(34)	C Art,	
Jun. 25,	(33,34,93,)	" "	
Jul. 23,	KM	19 inf,	American Lake
Jul. 23,	IL	" "	" "
Dec. 25,	28 Field Battery	Art,	Fort Leavernworth.
1905			
Jan. -	Det.	14 inf,	
Mch. 20,	17 & 18 Battery	F art,	
Apr. 24,	F S & Bd. A-M	14 inf,	
Jun. 7,	C	Sig Corps,	Benicia.
Sep. -	D	" "	Various stations.
1906			
Apr. 11,	LM	14 inf,	Monterey
May. 24,	17 & 18	F art,	San Francisco.
Jun. 4,	IK	14 inf,	" "
Jun. 11,	Hdqrs. H	" "	" "
Jun. 25,	ABG	" "	" "
Jul. 4,	CDEF	" "	" "
Jul. 8,	C	Engrs,	
Jul. 23,	B	Hosp Corps,	

Jul. 23,	I	14 cav,	
Jul. 24,	Hdqrs. Bd. CD	" "	
Jul. 24,	9,24	F art,	
Aug. 14,	(L)	14 inf,	Fort Wright.
Sep. 15,	F S & Bd. B-KM	" "	American Lake
Sep. 26,	17&18	F art,	
1907			
Apr. 12,	27	F art,	Fort Ethan Allen.
Apr. 16,	28	" "	Philippine Islands.
Jul. 20,	A	4 F art,	" "
1908			
May. 30,	B	Engrs	Fort Flagler.
Jun. 19,	Hdqrs.F S & Bd. A-M	1 inf,	Philippine Island.
Jul. 28,	1 st Squad	14 cav,	Walla Walla.
Aug. 31,	F S &Bd. ABE-M	1 inf,	American Lake.
Sep. 2,	Recruits		
Sep. 8,	"	4 F art,	Roy.
Sep. 16,	"	Engrs,	Camp Stanley.
Sep. 24,	Recruits		
Sep. 25,	"		
Oct. -	"		
Nov. -	"		
1909			
Jan. -	Recruits		Columbus.
Apr. 30,	F	Engrs,	Washington.
May. 18,	CEL	1 inf,	Target range.
Jun. 20,	(F)	Engrs,	" "
Jun. 20,	ABDG	1 inf,	" "
Jul. 23,	FHIKM	" "	" "
Dec. 9,	F & S AB	2 F art,	Ft. D. A. Russell.
1910			
Feb. 17,	(K)	1 inf,	Walla Walla.
Feb. 17,	(K)	" "	Boise.
Jun. 1,	F	Engrs,	Target range.
Jun. 3,	ABCDK	1 inf,	" "
Jul. 6,	EFGHILM	" "	" "
Aug. 13,	BCD	" "	American Lake.
Aug. 14,	D	2 F art,	Philippine Island.
Aug. 18,	EM	1 inf,	American Lake.
Aug. 21,	AFGHI	" "	" "
Aug. 26,	Hdqrs.Bd. M.G.P.	" "	" "
Aug. 31,	F	Engrs	" "
Sep. 1,	CD	1 inf,	Republic, Wash.
Sep. 7,	A	" "	Ashland.
Sep. 9,	L	" "	Wallowa.
Sep. 10,	AB	2 F art,	Roy, Wash
Sep. 10,	B	1 inf,	Union, Ore.
Sep. 12,	EFGHIM	" "	Butte Falls.

Table 5: Troops Leaving Vancouver Barracks, 1879-1910

DATE	COMPANY OR UNIT	REGIMENT	DESTINATION
1879			
Aug. 1,	I	21 inf,	Lapwai.
Oct. 22,	D	21 inf,	Ft. Townshed.
Nov. 11,	Recruits.	2 inf,	Ft. Coeur d'Alene.
1880			
Mch. 9,	GK (CE)	21 inf,	Presidio.
Jun. 11,	C	" "	Pomeroy, Wash. Constructing military telegraph.
Oct. 25,	C	" "	Ft. Klamath for Station.
1881			
Nov. 14,	Recruits.	2 inf & 21 inf,	Ft. Coeur d'Alene.
1882			
Mch. 23,	Recruits	2 inf,	Ft. Coeur d'Alene.
Mch. 27,	"	1 cav,	Walla Walla
Oct. 7,	"	2 inf,	Ft. Coeur d' Alene.
Oct. 8,	E	21 inf,	" Canby.
Oct. 11,	Det.	21 inf,	Escorting funds of N. P. R.R. to Clark's Fork, Mont.
Oct. 11,	Recruits		Walla Walla
1883			
Apr. 20,	GH	21 inf,	Summer Camp Neal Foster.
1884			
Jun. 25,	F S & Bd. EFGHIK	21 inf,	Dept. of the Platte.
1885			
Nov. 7,	ABCHIK	14 inf,	Seattle by "Lurline"
Nov. 7,	DEFG	" "	" " "Traveler."
1886			
Feb. 9,	ACDFGHIK	14 inf,	Seattle by "Lurline"
Jul. 1,	A	" "	Ft. Townsend for station.
Jul. 3,	Band	" "	Seattle for fouth of July, returned July 12.
Oct. 22,	K	14 inf,	Ft Klamath for station.
1887			
Jul. 16,	I	14 inf,	Field , near Fish Lake, Ore.
Jul. 16,	I Platoon E	1 art.	" " " "
Nov. 22,	I	2 inf,	Ft. Leavenworth.
Nov. 16,	Det.	" "	Ft. Canby.
1888			
Feb. 22,	Recruits for A	14 inf,	Ft. Townsend.
Mch. 19,	" " K	" "	Ft. Klamath.
Sep. 8,	EH	" "	Field, travled by boat 18 miles, marching 370 miles, return Oct. 4,
Sep. 8,	Platoon E	1 art,	

1889			
Jan. 25, Mch. 6,11, Sep. 14,	E Recruits K F S & Bd. BCDFGK	1 art, 14 inf, “ “	Presidio. Ft Klamath. Camp of Instruction, Cayuse, Ore. Traveled by rail 12 miles, by boat 172 miles, marched 324, total 508 miles. Returned Oct. 14,
Sep. 3, Sep. 13, Oct. 17,	F Det. F F	2 CAV, “ “ 2 CAV,	Lake Chelan. Returned Oct., 5. Escort to Division Commander, returned Sep. 29 Ft. Leavenworth.
1890			
May. 1, Aug. 18, Aug. 28, Sep. 8, Sep. 8,	Det. BCF K DEG H	14 inf, “ “ 14 inf, “ “ “ “	Ft. Canby. Chelatchie Prairie, 64 miles, returned Aug 27. Transferred. Yacolt Prairie, 64 miles, returned Sep. 17, Ft. Leavenworth
1891			
Aug. 19, Aug. 19, Oct. 5-14,	CG E BDEG	14 inf, 4 CAV, 14 inf,	Chelatchie Praire, 64 miles, returned Aug 28. Chelatchis, 66 miles.
1892			
Jul. 13,	BCDEF	14 inf,	Wardner, Idaho, S.). 99, Dept. Col. Assition civil authorities during miner troubles, returned Sep. 15 1892.
Nov. 7,	F	14 inf,	Ft. Townscnd.
1893			
May. 12, Sep. 3,	G CDEG	14 inf, “ “	Puyallup Reservation, returned Aug. 8, 1893. Salmon Post Office, Ore. Returned Sep. 12, 88 miles.
Sep. 19, Sep. 19,	AB E	14 inf, 4 art,	La Camas Creek, Wash. returned Sep. 21, 20 miles.
1894			
May. 12, May. 19,	ABCEG C “	14 inf,	Seattle. Left Seattle for Wallace, Idaho. Left Wallace for Ft. Sherman. Returned to post May. 31,
May. 21,	D ABEG	14 inf,	Umatilla Junction. Returned May. 26. Returned May. 30,
Jun. 8, Jul. 7, Jul. 10,	G Hdqrs. F & S ABDE E	14 inf, “ “ 4 cav,	Snake River Bridge, Idaho. Tacoma. “
1895			
Aug. 3,	E	4 cav,	To assist N.P. R.R. authorities. AD left Tacoma for Ellensburg. G Left Snake River for Spokane Jul. 17, Left Spokane for Tacoma Jul. 24, E 4 cav, BCEG 14 inf, returned to post Jul. 26. AD 14 inf, returned to post Jul. 30.
Sep. 11,	ABCEFH	14 inf,	Practice March, Tillamook, Ore. 49 Horses returned Aug. 23, 210 miles. Practice march and simulated campaign. ABF returned Sep. 14, CEH returned Sep. 15, each battalion accompanied By Det. Of E4 cav.
Oct 9-14,	ABG and CDH	14 inf,	Practice march, 60 miles

1896

Oct. 5-14,	F S & Bd. ABCEFH	14 inf,	Salem, Ore. 140 miles.
Oct. 14,	E	4 cav,	" "
	(Hosp. Corps.)		" "
Oct. 20-24,	DG	14 inf,	Practice March
	E	4 cav,	" "
	(Hosp. Corps.)		" "

1897

Sep. 10-19,	CDEG	14 inf,	Practice march, Salmon Creek Ore.
	1 platoon E	4 cav,	Practice march, Salmon Creek ore. 88 ½ miles.
Sep. 28-Oct 13,	ABFH	14 inf,	Practice March, Salmon, Ore.
	E	4 cav,	Practice march, 116 miles
	(Hosp. Corps.)		" "

1898

Feb. 5,	Det.	14 inf,	Alaska.
Feb. 15,	AG	" "	Skagway, Alaska.
Feb. 25,	Hdqs. BH	" "	Dyea,
May. 7,	Bd. CDEF	" "	San Francisco.
May. 21,	Hdqs. AG	" "	" "
Jun. 4,	E	4 cav,	" "
Oct. 15,	A Light Battery	Ore. Vols.	Mustered out.
Oct. 15,	Independent Batt. Wash	" "	" "
Jul. 23,	F S & Bd. CHKM	1 Wash, Vols,	San Francisco.

1899

Jan. 31,	F & S DGIH	8 Cal Vols,	Mustered out.
May. 3,	Det. B	24 inf,	Wardner, Idaho.
May. 14,	L	" "	Alaska.
May. 27,	BK	" "	Benicia.
May. 27,	H	" "	" "
Oct. 3,	Regiment	35 inf,	Manila.
Nov. 2,	"	39 inf,	" "
Nov. 2,	"	45 inf,	" "

1900

Mch. 22,	C	7 inf,	Manila.
May. 16,	B	24 inf,	
May. 30,	(ABIK)	7 inf,	Alaska
Jun. 4,	M	" "	Wallace, Idaho.
Jul. 21,	H	" "	Alcatraz.

1901

Mch. 25,	Convalescent	Co. No. 3,	Ft. Wright.
Mch. 25,	"	"	Boise.
Mch. 25,	"	"	Walla Walla.
Sep. 6,	FG	28 inf,	Ft. Wright.
Sep. 7,	EH	" "	Boise.
Nov. 12,	F S & Bd. ABCDIKLM	" "	P Islands.
Dec. 15,	(ABC)	7 inf,	inf, Ft Harrison, Mont
Dec. 23,	(C)	" "	Disbanded to AB 7 inf.

1902

May. 6,	F S & Bd. A	7 inf,	Presidio.
Aug. 23,	36 F Battery	Art,	Camp Dyer.

1903

Jun. 20,	Recruits	C art,	Ft. Flagler.
----------	----------	--------	--------------

1903 (cont.)			
Jun. 24,	F S & Bd. A-H	17 inf,	P Islands.
1904			
Jun. 7,	8 F Battery	Art,	American Lake,
Jun. 9,	26 " "	" "	" "
Jun. 20,	ABCD	19 inf,	Camps Nesqually & Stalacoom.
Jun. 25,	Bd. EFGH	" "	Camps Nesqually & Stalacoom. Bd.
			Returned Jul. 21, 2 Batt. Jul. 26.
Jul. 5,	Hdqs.	19 inf,	American Lake,
Jul. 23-25,	(33.34.93.)	C Art,	by "Howard"
Dec. 24,	26 Battery	F Art,	P. Islands.
1905			
Jan. 6,	8 Battery	F Art,	Ft. D. A. Russell.
Apr. 1,	F S & Bd. A-M	19 inf,	P. Islands.
Jun. -	(C)	Sig. Corps.	
Sep. 15,	(D)	" "	Omaha Barracks.
Nov. 1,	LM	14 inf,	Presidio Monterey.
1906			
Apr. 20,	A-K	14 inf,	San Francisco. (earthquake.)
Apr. 21,	17 & 18 Batteries	F Art,	San Francisco. (earthquake.)
Jul. 1,	(L)	14 inf,	Ft. Wright.
Jul. 2,	M	" "	Ft. Lawton
Jul. 10,	C	Engrs	American Lake,
Jul. 24,	HIK	14 inf,	" "
Jul. 25,	BG	" "	" "
Jul. 25,	B	Hosp. Corps.	" "
Jul. 28,	F & S Bd. CDI	14 cav,	" "
Jul. 29,	9 F Batt.	Art,	" "
Jul. 30,	24 " "	" "	" "
Jul. 31,	Hdqs. Bd. Cdef	14 inf,	" "
Aug. 2,	17 & 18 Batteries	F Art,	" "
Oct. -	" "	" "	Cuba via Newport News.
1907			
Apr. 1,	E	14 inf,	Monterey.
May. 2,	27 Battery	F Art,	P. Islands.
Aug. 8-28,	IKLM	14 inf,	Oretown, Ore.
Aug. 18-Sep. 10,	Hdqs. F S AB	4 F Art,	Roy, Wash.
Sep. 3-23,	Hdqs. 1st & 2 nd Batt.	14 inf,	Tum Tum Mountain, Wash.
Nov. 7,	Det.	14 inf,	Transferred to 1 inf.
1908			
Jan. 3,	Hdqs. F S & Bd. A-DF-M	14 inf,	P. Islands.
Jun. 12,	Det. B	Engrs,	Moclips, Wash, map work.
Jun. 20,-Sep. 16,	B	" "	American Lake, Camp Stanley.
Jul. 13,-Sep. 8,	Bd. AB	4 F art,	Camp Stanley, marching.
Jul. 15,	Hdqs. Bd. ABIKLM	1 inf,	" " "
Jul. 15,	2 " Batt.	" "	" " by rail.
Jul. 15,	1 " Squad	14 inf,	" " " "
1909			
Apr. 29,	CEL	1 inf,	Target range At Elliott's Farm
May. 1,	B	Engrs,	Washington, D. C.
May. 17,	ABDG	1 inf,	Target range
May. 17,	Det. F	Engrs,	" "
Detachment	Off Engrs. On Military Map	Making	
May. 19,	1 F	Engrs,	Port Angles, returned Nov.-

1909 (cont.)			
May. 18,	2	"	Astoria, Nov.
May. 19,	3	"	Porter, Wash. Nov.
May. 19,	4	"	Marshfield, Ore. Oct. 28
May. 19,	5	"	South Bond, Wash. Nov.
May. 20,	6	"	Toledo, Ore. Nov.
May. 30.-Jun. 6,	CEL	1 inf,	A. Y. P. Exp. Tournament.
May. 30.-Jun. 6,	Hdqrs. F & S (AB)	4 F art, 40	" " " "
Jun. 21.-Jul. 23,	FHIKM	1 inf,	Target range
Jul. 10-31,	G & M.G. Platoon,	" "	Clackamas, encampment of O. N. G.
Jul. 4-25,	Hdqrs. F S & Bd AB	4 F art,	Grand Ronde, Ore.
Aug. 8-26,	Hdqrs. F S & Bd EFIKLM	1 inf,	" " "
Aug. 1-Oct. 7,	AB	1 inf,	Ft. Wright.
Aug. 2-Oct. 6,	CD	" "	Ft. Lawton,
Sep. 26-Oct. 1,	FH	" "	Ft. Lawton, (Taft Day)
Oct. 2,	Entire Garrison		Portland, " "
Oct. 29-09-Feb.	K	1 inf,	Ft. Walla Walla.
17,10.,			
Oct. 29-09-Feb.	K	" "	Boise Barracks.
17,10.,			
Dec. 9,	Det.	4 F art,	D. A. Russell, with stock train.
Dec. 10,	Hdqrs. F S & Bd. AB	4 F art,	D. A. Russel for station.
1910			
Mch. 17- Jun. 1,	F	Engrs,	Target range near Proebstel.
Mch. 29,	F	"	Ft. Stevens for topographical work.
Apr. 25- Jun. 3,	ABCDK	1 inf,	Target range.
May. 17,	(F)	Engrs.	Military Map work. Seven detachments all out on map work
Jun. 2- Jul. 6,	EFGHILM	1 inf,	Target range.
Jul. 15,	Hdqrs. A	2 F art,	American Lake.
Jul. 15,	Hdqrs. EFGHIM	1 inf,	" " "
Jul. 22,	B	2 art,	Tacoma for tournament.
Jul. 22,	Bd. ABCD	1 inf,	" " "
Aug. 21,	A	1 inf,	Companies sent from American Lake to fight forest fires
Aug. 13,	B	" "	Ashland, Ore. Returned Sep. 7,
Aug. 13,	CD	" "	Union, Ore. Returned Sep. 10,
Aug. 18,	EM	" "	Republic, Wash returned Sep. 1,
Aug. 21,	FGHI	" "	Butte Falls, Ore. Returned Sep. 12.
Aug. 21,	L	" "	Butte Falls, Ore. Returned Sep. 12.
Oct. 13-22,	D	2 F art,	Wallowa, Park, Ore. Returned Sep. 9,
			Roy, Wash. by rail & returned by rail.

Historic Personages Associated With the Department of the Columbia, 1880-1910

The following officers and NCOs stationed at Vancouver Barracks during the Department of the Columbia years earned national reputations. There were many notable Army officers at Vancouver prior to 1880, but this is before our period. It is also important to note that none of these men is clearly associated with any specific West Barracks building.

Thomas McArthur Anderson As a Civil war officer with cavalry and infantry groups he fought in 18 battles, he was wounded twice, and was twice brevetted for gallantry under fire. Served with the 14th Infantry at Vancouver Barracks. Author of military books and magazine pieces.

Robert L. Bullard General Bullard graduated from West Point and served in the Army during the Spanish-American war and the Philippine Insurrection. Later he served on the Mexican border. During World War I, he commanded the 3rd Corps. After retiring from the Army in 1925, he was elected president of the National Security League, a patriotic organization.

William Carlin Graduated from West Point in 1850 and had a distinguished career in the Civil War. He also fought in the Indian wars in the Dakotas before assuming command of the Department of the Columbia.

Frederick Funston Amazing and colorful American "original" who began his career after Kansas State University as a journalist, then became a botanist on major expeditions, then a coffee planter in Mexico, then an artillery officer with the Cuban revolutionaries. When war with Spain was declared, he organized the 30th Kansas Volunteers and led them to a very successful campaign in the Philippines. Funston himself captured the rebel leader Aguinaldo, which led to peace in the Islands. President McKinley appointed Funston a Major General in the Regular Army as a reward for service. Commanding Officer of the Department of the Columbia late in his career.

John Gibbon Graduated from West Point in 1847 and commanded a division at major battles including Gettysburg. In the Indian Wars he commanded the Department of Montana, fighting Sitting Bull and the Nez Perce. He took command of the Department of the Columbia in 1885.

George W. Goethals Graduated from West Point in 1880 and served as an engineering officer at Vancouver Barracks between 1882 and 1884. Later, he took charge of the work on the Panama Canal in 1907 and completed that project in 1914. After the Canal project, he consulted on many engineering projects and held several Federal appointments.

O. O. Howard Graduated from Bowdoin College in 1850, then from West Point in 1854. He completed an MA degree and taught mathematics at West Point for 10 years before the Civil War. His service in the Civil War was distinguished and he was appointed Commander of the Department of the Columbia in 1874 during the final years of the Indian Wars.

Steven P. Jocelyn Served in the Civil War with the Vermont Volunteers and then enjoyed a rapid rise in the regular Army. He served in the Spanish War and the Philippine Insurrection. Author of several books on exploration of Alaska and military topics.

A. V. Kautz Graduated from West Point in 1852 and served in Oregon and Washington during the Indian Wars of the 1850s. In the Civil War, Kautz served with distinction in several major battles. After the war, he returned to the West where he served in Arizona, California, and at Vancouver Barracks. He retired in 1892.

Nelson Miles Served on the Great Plains and won a reputation as the Army's foremost Indian fighter, defeating Sitting Bull, Crazy Horse, Geronimo, Chief Joseph, and other Indian leaders. He was Commander in Chief of the Army at the outbreak of the Spanish war and received the surrender of the Spanish Army in Cuba.

Frederick Schwatka Attended Willamette University in Salem, Oregon, and then graduated from West Point in 1871. Studied law and medicine, obtaining a medical degree and passing the New York Bar. Participated in several major arctic expeditions before resigning from the Army in 1884. Continued as an explorer, writer, and lecturer until his death in 1892.

Charles Erskine S. Wood Graduated from West Point in 1874 and served as an aide to General O.O. Howard during the Indian wars. He was given custody of Chief Joseph after his surrender and the two remained lifelong friends. Wood resigned from the Army in 1884 and practiced law in Portland until 1919. Wood was a prolific writer, painter, and social activist. He defended the IWW in court, and championed the passage of the Oregon System of initiative, referendum, and recall.

Moses Williams Was the first African-American winner of the Congressional Medal of Honor. Williams is buried at the Vancouver Barracks cemetery

Significance of the Department of the Columbia Garrison Theme

The Department of the Columbia period was important to Vancouver Barracks and to the West Barracks because of the level of activity and the buildings that date from that period. The Infantry Barracks, Building 607, comes from the building program of the 1880s and the need to improve barracks on the post. This is one of the three new "single" barracks buildings completed in 1887 for the 14th Infantry. Many of the residences on Officers' Row date from this program as well. The 1905 Artillery Barracks (Building 638) had its genesis in the building program of the 1900s. In this program, the Army was up-grading Vancouver Barracks to house one of the new, larger, post-Spanish War Infantry regiments and two Artillery companies.

The Post Hospital also dates from the building program. Part of its significance comes from its association with the garrison theme, but the Post Hospital has a long and useful life after the Department of the Columbia is retired in 1913. The hospital's period of significance extends through World War I and the Depression, up until 1941 when it was replaced by Barnes Hospital.

Other buildings in the West Barracks group were built for what we might consider primary military use. These are the Mess Hall (Building 628, 1914), the Quartermaster's Storehouse (Building 630, 1914), and the Non-Commissioned Officers' Duplexes (600s, 1939). These buildings post-date the Department of the Columbia, however, and their connections with the garrison at Vancouver are not so clear. The duplexes were a project of the Works Projects Administration (WPA), which was a New Deal social agency. It is doubtful that the Army would have spent its own money on permanent buildings for Vancouver barracks in 1939—six years before the post was declared surplus. The Mess Hall and the Storehouse were utility structures built on masonry piers, without perimeter foundations, and finished in a spartan fashion. They were needed to replace existing buildings that had become superannuated.

In the grand scheme of the history of the U.S. Army, the Department of the Columbia was a significant frontier Department, but probably no more so than other Departments in the western states. Its period of greatest activity and special significance comes in the 1870s. The Department was not headquartered at Vancouver at this time, although troops assigned to the Department were stationed there.

The Department of the Columbia garrison theme, then, is the primary theme in interpreting the Infantry barracks and the Artillery barracks, which are two of the most conspicuous buildings in the West Barracks group.

THEME II: U.S. ARMY MEDICAL CARE AND VANCOUVER BARRACKS 1880-1941

Five buildings within the West Barracks complex relate to the medical care of U.S. Army personnel. The three primary medical buildings are the Post Hospital (614), completed in 1905; Dental Surgery Building (626), constructed sometime after 1888 and moved to its present location about 1910, and the Red Cross Convalescent House (636), begun in the fall of 1918 and completed in early 1919. The Hospital Steward's Residence (631) built in 1887-1888, and the Hospital Sergeant's Residence (621) built in 1907, are also connected with medical administration at the post. The structures represent two periods of development at Vancouver Barracks: pre-1900 and post-1900. These buildings also reflect distinct eras in the history of military medical practice. From these facilities, U.S. Army physicians, nurses, and assistants used the resources available to them to administer military health programs and to treat the diseases and injuries that afflicted officers, soldiers, civilian employees and their dependents.

The Hospital Steward's residence and the Hospital Sergeant's residence represent the practices of 19th century medical building design. The Steward's residence was constructed in the late 19th century prior to the implementation of firmly standardized architectural and building plans. While the Quartermaster's Department suggested and examined plans selected for use at individual posts, most choices concerning materials and details were left to commanding officers. The Hospital Steward's residence and the Hospital Sergeant's residence are two early, pre-standardization versions of what was to become plan QMO Plan 87.

By 1900 and the end of the Spanish-American War, the need for modern, efficient and cohesive development at Army posts became apparent. In response, the Quartermaster's Office produced specific building designs and drawings for all improvements. In hospital construction, advancing surgical procedures, clearer understanding of sanitation's importance, the availability of electricity as well as other technological advances such as the X-ray, led to the international sanatorium movement and significant improvements in hospital design. The construction of the 1904 Post Hospital was a direct result of these modernization efforts.

At the end of World War I, Vancouver Barracks was inundated with servicemen needing care. During the influenza epidemic of 1918 thousands of soldiers were admitted

to the Post Hospital. Although that immediate crisis eventually passed, troops returning from overseas through Army facilities at San Francisco, swelled the ranks at Vancouver Barracks. In the spring of 1918 the American Red Cross completed construction of one of many Convalescent Houses that the organization erected at military installations around the United States. The modern, attractive building was used to house those soldiers dismissed from the Post Hospital still needing rehabilitative care.

Eventually, each of these buildings saw changes in use as newer buildings became available. The Post Hospital continued to serve Vancouver Barracks after the completion of the new Barnes General Hospital in 1941. After the Veteran's Administration took over Barnes Hospital in 1946, the Post Hospital eventually closed to medical service. Despite the ensuing changes in use, the Hospital Steward's residence, the Post Hospital and the former Dental Surgery building represent the medical care available to America's soldiers generally and Vancouver Barracks soldiers in particular.

U.S. Army Medical Care and Facilities: 1880-1899

In the years following the Civil War, U.S. Army physicians had few effective means available to combat disease. While medical practitioners gradually began to appreciate the importance of preventive medicine, an understanding of the health risks of poor sanitation lagged. In an effort to stimulate implementation of sanitation efforts by military surgeons, the U.S. Surgeon General required post surgeons to report to him regularly about the conditions of their facilities.¹³ Smallpox, cholera and yellow fever posed critical challenges to Army physicians. Rheumatism, bronchitis, venereal disease, kidney and circulatory ailments confronted them constantly. Tuberculosis retained its place as the major cause of adult deaths in the last half of the 19th century. Inadequate food, filthy living conditions and exhausting labor lent strength to all diseases.

Few effective means were available to treat disease after its occurrence. Ether, chloroform, nitrous oxide and opium were available for surgical procedures. Digitalis was used for cardiac edema. Mercury aided the treatment of syphilis. Quinine helped those with malaria. Various medications were administered either by rectum, mouth, inhalation, or application to the skin. Many ailments were considered self-limiting; a patient could expect to recover with or without a physician's help. Dentistry too, remained primitive. At Army posts across the country, dental surgeons, assisted occasionally by hospital stewards, treated painful dental conditions primarily by pulling the patients' teeth.

¹³Mary C. Gillett, *The Army Medical Department 1865-1917*, (Washington DC: U.S. Army Center for Military History, 1995), p. 39.

Despite limitations, medical advances gradually occurred. In 1878 Dr. J. Marion Sims performed the first gall bladder operation and in 1882 Robert Koch discovered the bacillus that caused tuberculosis. Researchers identified appendicitis, formerly known as typhlitis, in 1886. Surgeons began to diagnose appendicitis with increasing accuracy and appendectomies soon became common.

The military physicians practicing in the late 19th century came from a variety of medical backgrounds. Some were recruited from large city hospitals or individual practices. Not all had extensive educational backgrounds. By 1880 however, medical education had developed considerably, with a number of orthodox medical schools opening throughout the country. As historian Gillett observed, however, military medicine had particular requirements that civilian medical schools did not adequately address. These schools:

.....devoted scant time to the preventive medicine that was so vital to maintaining the health of any Army unit... Moreover, the administrative aspects of military medicine were expanding... but civilian medical schools did not familiarize young physicians with either the intricacies of the resultant paperwork or...the design of hospitals and ventilating, heating, and sewer systems.¹⁴

Composed of widely separated, isolated posts, each U.S. Army installation needed to have a building where ill soldiers could rest and receive treatment in isolation from others. In the decades following the Civil War, the Army Medical Department produced standardized plans for hospital buildings of various sizes including those for twelve, twenty-four or forty-eight bed sizes. "...Congress gave the department less than half that required to give each Army post a hospital, to keep it in good repair, and to replace it every ten years."¹⁵

In addition to tending to soldiers, medical officers were allowed and often encouraged to treat area citizens as well as civilians residing at the post including quartermaster employees and officers' families and servants. In the mid 1880s, "the Army stated specifically that both regular and contract surgeons must care for the families of officers and enlisted men without pay as part of their normal duties whenever 'practicable.'¹⁶ In the last years of the 19th century, however, Army posts gradually

¹⁴Gillett, p. 326.

¹⁵Gillett, p. 51.

¹⁶Gillette, p. 56

diminished in number, while the remaining facilities increased in size. The surgeons' private medical practices grew to the point of interfering with their military practices. Historian Gillett notes that in 1892 [the Surgeon General] "concluded that a private practice interfered 'materially with the performance of public duties' and ordered the time-honored custom abandoned."¹⁷

During the 1890s medical science saw the development of various important diagnostic tests. In 1895 an antitoxin was developed in Europe that vastly improved methods of treating diphtheria. X-Ray equipment was first introduced in 1896 and during the same year an anti-typhoid inoculation was introduced. The stethoscope, available since the first quarter of the nineteenth century, had improved steadily although not all physicians immediately realized its usefulness.¹⁸ All these discoveries advanced medical practice at U.S. Army posts, but the lack of adequate surgical or laboratory facilities hampered progress.

In April 1898, Congress authorized military action against Spain, initiating action that resulted in several conflicts known together as the Spanish-American War. To sustain the military effort, Congress also approved an increase in military regulars from about 27,000 to nearly 65,000 officers and men. The U.S. government also asked for 125,000 volunteer soldiers, willing to sign up for two years of service. By August 1898, over 275,000 men had joined the U.S. military. The demands on the Army Medical Department were overwhelming. U.S. Army leaders, accustomed primarily to treating soldiers wounded in Indian conflicts at the nearest post, found themselves preparing for a foreign war of extremely large scale.

As the spring of 1898 wore on, thousands of men gathered at various camps in the southern United States to prepare for the invasion of Cuba. At the same time, the Philippine Expeditionary Force gathered at San Francisco, to organize for an attack on Manila. U.S. Army regulars and volunteer soldiers throughout the United States gathered at military posts and camps for processing, training and transfer to embarkation points. During the duration of the conflict, these Army posts served as centers for instructing and training soldiers for military service.

¹⁷Gillett, p.56.

¹⁸Ann Novotny and Carter Smith, ed. *Images of Healing, A Portfolio of American Medical and Pharmaceutical Practice in the 18th, 19th, and Early 20th Centuries*, (New York: Macmillan, 1980) pp. 44-45.

Medical Care and Facilities at Vancouver Barracks: 1880-1899

Following the establishment in 1879 of Vancouver Barracks as headquarters of the Department of the Columbia, the Army focused new attention on the post, initiating a major expansion of facilities. Additional funding resulted in the construction of new administrative, medical and residential structures throughout Vancouver Barracks. Buildings related to medical care constructed during this period included a hospital, begun in 1883 and completed in 1884, a "dead house" or mortuary, that may have been remodeled for use later as the dental surgery (Building 626), and the Hospital Steward's Residence (Building 631), constructed in 1887-1888. Other structures erected during the 1880s included double officers' quarters, infantry barracks, headquarters buildings, and quarters on Officers' Row. Construction and development at Vancouver Barracks slowed during the difficult economic years of the 1890s.

Three separate structures served Vancouver Barracks as post hospital during the 19th century. Barracks historians identify the first hospital at Fort Vancouver as a crudely constructed building erected in 1850. A large influx of troops brought in to suppress Indian unrest resulted in the building of a second hospital in 1858.¹⁹ Composed of a brick foundation, wood frame and weatherboard and shingle siding, this hospital was described in 1870 as a large building...."with high ceilings and large windows for convalescents in the main building."²⁰ This hospital was used to care for troops garrisoned at the post, as well as officers' servants, laundresses, cooks, and officers' family members.²¹

The hospital completed at Vancouver Barracks in 1884 near the post's western boundary was the third to be constructed on the post and would remain in use for twenty years. Like other Army hospitals of the period, its construction required certain official procedures. As described by Alison K. Hoagland:

Post hospitals fell under the purview of the Surgeon General's office and after 1870 the Surgeon General received a separate appropriation for hospital construction. Hospital designs originated at the posts, but required approval by the Surgeon General's office as well as the quartermaster general's office....²²

¹⁹Ted Van Arsdol, "Mending the Troops," *The Columbian*, Feb. 28, 1999.

²⁰"A Report on Barracks and Hospitals with Descriptions of Military Posts," [Dec 5, 1870], *Clark County History*, vol. 5, p. 68.

²¹Mary Rose, "Army Doctors at Vancouver Barracks," *The Columbian*, Feb 21, 1999.

²²Alison K. Hoagland, *Military Accommodations: Architectural Adaptations at Three Wyoming Forts*, (Salt Lake City: University of Utah Graduate School of Architecture, 1977)

The wood frame hospital at Vancouver Barracks followed regulations in its planning and construction process, with local military staff seeking approval from the Surgeon General's office for their plans. According to Army regulations:

Requests for the erection of regulation hospitals will be made by the Medical officer, through the commanding officer. The location of the building, the proposed material, the exact modifications of the regular plan (if any)... and the estimated cost, are to be stated in the request...

...The officer charged with the construction will consult, as to minor details, with the Medical officer of the post, who will act as inspector of the work on the part of the Medical Department...²³

Reflecting the configuration devised in typical plans of the period, Vancouver Barracks' new hospital was composed of a two-story central administrative building, flanked on each end by wards located in two-story wings. The kitchen, dining room and attendants' quarters were situated at the rear. A veranda extended across the façade of the central building and adjoining wings(see figure 11).

Additional improvements constructed at Vancouver Barracks during the decade included the post's Hospital Steward's residence, completed in 1888. The Quartermaster's Department approved plans for this dwelling for housing senior NCOs who served as hospital administrators. The decision by U.S. Army leaders to provide a separate Hospital Steward's dwelling granted them their own quarters for the first time. During previous decades, Steward's lodgings had consisted of a room in the hospital. This older arrangement as described in the Surgeon General's annual report for 1885 was "found to be inadequate, especially since the greater number of stewards are married and have families."²⁴

With the outbreak of the Spanish-American War in 1898, the 14th Infantry and other regular Army units at Vancouver Barracks prepared for transfer to distant duty. In the spring of 1899, additional companies of the 14th Infantry Division received orders to report to the Presidio at San Francisco in preparation for transport overseas. While the

p.24.

²³David Clary, *A Life Which is Gregarious in the Extreme: A History of Furniture in Barracks, Hospitals, and Guardhouses of the United States Army, 1800-1945* Vol. II (Harpers Ferry, West Virginia: USDI National Park Service, 1983) p. 621.

²⁴Bethany Grashof, *A Study of United States Army Family Housing Standardised Plans, 1866-1940* (Atlanta: Georgia Institute of Technology, 1986) Vol.1, p. 19.

Figure 11 1884 Post Hospital National
Archives collection



regular Army departed company by company for foreign duty, the national call for volunteer enlistment brought steady occupation of Vancouver Barracks by new troops. During the entire period of the war, the Vancouver Barracks served as a mobilization and training center for Oregon and Washington volunteers.²⁵ During the entire period of the Spanish American War, the post hospital at Vancouver Barracks served as the center for medical care for troops training there and for those returning to the northwest from the Pacific. Vancouver Barracks physicians treated soldiers for diseases contracted abroad, as well as for those acquired in close association with ill comrades. According to Army regulations, enlisted men answering sick call were taken to the hospital by a noncommissioned officer who turned them over to the attending surgeon. Among the more frequent illnesses demanding treatment were measles, malaria, mumps, typhoid fever, tuberculosis, and venereal diseases.²⁶

U.S. Army Medical Care and Hospital Development: 1900-1917

Medical knowledge accumulated during and as a result of the Spanish American War brought about more advances in medicine. In 1901 a Riva-Rocci sphygmomanometer, the first practical apparatus for measuring blood pressure, was introduced in the United States from Italy. Psychoanalysis first received public recognition in 1909 when Sigmund Freud and Carl Jung gave a series of lectures. In 1913 the Rockefeller Foundation began a worldwide program for the study and control of hookworm, malaria and yellow fever. The same year radium, discovered in 1898 by the Curies, was found valuable in treating malignant tumors. In the period immediately following the Spanish-American War, advancements were made too in military medicine. The Army Medical Department put great effort toward combating cholera, dysentery, and typhoid fever. By 1911, typhoid cases in the Army dropped considerably as a vaccine was uniformly administered to all troops.²⁷

The Army Medical Department's struggle to enlist an adequate number of qualified physicians continued. The medical officers who did serve, however, had gained increasing knowledge in combating disease and infection. Particularly critical to military medicine were improved methods of sanitation and better understanding of wound infections. Improvement in these areas allowed Army surgeons to attempt many kinds of surgeries

²⁵Van Arsdol, 1991, p. 68.

²⁶Clary, 624; 639.

²⁷Novotny and Smith, p. 81.

once much too dangerous. Increasingly clean living quarters and kitchens, improved sewer systems and fresh water sources contributed to health efforts.

In 1898 Secretary of War Elihu Root initiated broad changes in Army organization. New patterns centered on strong centralized control and close coordination between Army branches: "His efforts resulted in the creation of the New Army, a modernized force capable of international responsibilities in the twentieth century."²⁸ These modernizing efforts would eventually affect not only the Army's administrative organization, but its physical structures as well. According to Secretary Root:

The policy of the War Department... was to increase the size of the posts in which the Army was quartered rather than to increase their number. This policy was dictated by a desire to promote "economy of administration" and, even more important, to promote "efficiency of officers and men."²⁹

Aided by railroad expansion that facilitated transport of troops and supplies, the Army abandoned several temporary posts and focused its attention on the number of remaining permanent installations. An act of February 2, 1901, authorized for the Regular Army approximately 100,600 officers and enlisted men, an increase of approximately 35,000 soldiers over an earlier act in 1899 that had originally reorganized the Army. With the decision to develop a series of permanent posts throughout the country came generous funding by Congress. In 1901 and years following, the Army conducted extensive building programs, erecting hospitals, barracks and administrative buildings. An annual report from the Quartermaster General gives some indication of the scope of work:

'It is safe to say, ... that a vastly greater amount of construction work was planned, undertaken, and contracted for during the fiscal year 1902-1903 than during any previous year in the history of the Army.'³⁰

The expanding budget for improvement of Army posts throughout the country continued throughout 1904. Among the appropriations that year were \$4,750,000 for barracks and quarters including \$1,500,000 for construction and expansion of military posts, and \$475,000 for the construction and repair of hospitals.³¹

²⁸Alison K. Hoagland. "The Invariable Model: Standardization and Military Architecture in Wyoming 1860-1900," *Journal of the Society of Architectural Historians* 57 (1998) p. 312.

²⁹Erna Risch, *Quartermaster Support of the Army: A History of the Corps 1775-1939*, (Washington DC: Center for Military History, United States Army, 1989) 580-581.

³⁰Risch, p. 581.

³¹Clary, p. 110.

The Medical Department found that administering the newer post hospitals was more efficient and economical than running the small, older wood-frame buildings. The installation of electricity and equipment for heating water in new brick buildings, as well as flooring and wall materials that could be kept sanitary, increased the department's ability to care for ailing soldiers. Additionally, the official requirement that each post hospital retain a room set aside solely for surgical practice aided in institutional efficiency and safety.³² A Congressional document recorded the Surgeon General's statement that he had:

...endeavored to make our equipment for surgical work, in hospitals... as complete as could be desired. I have insisted upon every hospital of any size [having] a suitable operating room... with all the appliances required for aseptic surgical work, and with a laboratory fitted up for such bacteriological, pathological, and chemical investigations as might be required in connection with clinical work...³³

While incorporating new medical knowledge and improving facilities, post physicians continued to treat diseases most commonly occurring including influenza, venereal disease, alcoholism, hernia, appendicitis, tuberculosis, intestinal disorders, in addition to treating patients injured by work-related accidents or gunshot wounds.

While the lack of qualified physicians in the Army remained a constant problem, the enrollment of trained dentists lagged even farther behind. During the Spanish American War, soldiers' long periods of service in the tropics resulted in severe deterioration of their teeth. At the same time, increasing knowledge concerning the causes of dental decay offered the possibility of prevention and treatment. In February 1901, Congress accompanied its authorization for an increase in the number of Medical Department officers with an approval for contracts with one "dentist for every 1,000 men, up to a maximum of thirty dental surgeons, who as civilians were given the relative rank of lieutenant."³⁴

Increasingly, skilled dentists were installed at Army hospitals to treat dental conditions. In some cases the dentists were members of the Army Medical Department and in some instances they were contract dentists hired to assist or provide service. Abscesses, gum inflammation and other problems were regular challenges and the practitioners studied means for treatment other than extraction. As historian Gillett noted:

³²Gillett, p.361.

³³Clary, p. 95.

³⁴Gillett, p. 326.

“Since using extraction to deal with rampant decay would leave too many soldiers with too few teeth to eat the Army ration, more and more teeth were filled or crowned rather than removed.³⁵

The military dental profession received a further boost when, on March 3, 1911, the President approved an act that added a dental corps to the Medical Department and detailed criteria for qualifications, service and pay.³⁶

By 1916, the likelihood of U.S. involvement in the War in Europe became increasingly certain. As congressional committees prepared legislation later known as the National Defense Act of 1916, they invited Surgeon General Major Gen. William C. Gorgas to testify concerning the Medical Department's needs. With the Army fifty percent larger than in 1908 and less than five physicians for each 1000 men, the Surgeon General stressed that there was an inadequate number of physicians available even for peacetime medical attendance for the Army's posts within the United States. The Surgeon General explained that medical staffing for peacetime would require an increase to seven physicians per 1000 enlisted men and that formal engagement in war would demand at least ten physicians per 1000 men.³⁷

Gorgas' testimony helped frame new legislation that called for gradually adding officers to the Medical Department. No new legislation was required to increase the size of the Dental Corps since the Medical Department was allowed to hire contract dentists. The National Defense Act of 1916 changed the organization of the dental corps, abolishing the position of the contract dental surgeon and decreeing that qualified applicants immediately receive a lieutenant's commission.³⁸

Medical Care and Hospital Construction at Vancouver Barracks: 1900-1917

As in other parts of the country after the Spanish-American War, the government increased the size of the standing army at Vancouver Barracks. U.S. Army leaders selected the post to house an infantry regiment and two batteries of artillery. Here, during

³⁵Gillett, p. 326.

³⁶Percy Ashburn, *History of the Medical Department in the U.S. Army* (Boston: Houghton Mifflin, 1929), p. 211.

³⁷Gillett, p. 377.

³⁸Gillett, p. 379.

the first decade of the 20th century, personnel concentrated on maintaining combat readiness. In 1902, the small and outdated 1884 post hospital (almost twenty years old) still served the Barracks.

The end of the Spanish American War brought seriously ill soldiers from units going to and from the Pacific into larger general hospitals such as one at San Francisco, California. The Vancouver Barracks Post Hospital, however, served as a medical center for troops arriving there from the Pacific via San Francisco, or preparing for transport.

In 1902, with funds now available for facility improvement, the Department of the Columbia sought a new hospital for Vancouver Barracks. In a letter to the Surgeon General dated November 11, 1902, Major Rudolph G. Ebert complained that the 1884 hospital had ward beds for only 24 patients with isolation beds for an additional two patients. He noted that there was not enough dormitory room for the hospital staff and that there was inadequate dining room for staff and convalescent patients. Ebert also mentioned the problems with health administration space:

There is but one office for the Surgeon, and when patients come to consult the assistants, this has to be vacated for the time. There is no room suitable for physical examination of recruits, deserters, etc. No place except upper hall for instruction of Hospital Corps, no day room for men while off duty, no store room for personal effects of privates, no waiting room for patients except dispensary.³⁹

Early in 1903 using monies granted as part of the military building program, Army leaders initiated major construction projects at Vancouver Barracks. Some of these planned improvements would take several years to complete. The projects included construction of several sets of barracks, fifteen sets of officers' quarters, an amusement hall, drill hall, and the quartermaster's storehouse. Construction also began during 1903 on a new 48-bed brick hospital that would be completed the following year. In 1910, an older structure was moved across the street from the hospital and remodeled for use as a dental office.

Many of the new medical buildings appearing on posts across the U.S. at this time were built from standard Quartermaster's plans, but the Post Hospital and the Dental Surgery were not. The Standard QMO hospital plan for the 1899-1903 period is Plan 130, which is a structure that does not incorporate the characteristics of the sanatorium movement. It is a much older plan, and similar in many respects to the 1884 post hospital. The 1904 hospital was built to plans provided by the Surgeon General's Office rather than the Quartermaster. These plans, one copy of which is preserved in the National Archives, show a much more modern hospital than QMO Plan 130.

³⁹Major R.G. Ebert to Surgeon General, November 11, 1902. In National Archives RG 393, entry 482, file 7.

Completed at a cost of \$95,337.55 in 1904, Vancouver Barracks' new 48-bed hospital had a stone foundation, brick walls and a slate roof. With provision for hot water, electricity and water and sewer connections, the new facility met the modern standards introduced under the Army's expanded building program. In the decade following the Post Hospital's completion, workers made several improvements including remodeling the operating room in 1905, placing baseboard throughout the hospital in 1907, installing wall lockers in 1910, and constructing a disinfecting chamber in 1913.⁴⁰

Into the new hospital's examining and operating rooms came patients for treatment. Men stationed at Vancouver Barracks sought help for various common illnesses as well as injuries. Soldiers returning from overseas suffered the lingering effects of malaria in addition to tuberculosis, dysentery and other diseases.

In 1913 Vancouver Barracks' role changed again when the military abolished the Department of the Columbia. The post became the headquarters of the Seventh Brigade, reporting to Third Division headquarters in San Francisco. The reorganization meant a decline of soldiers at the post where, by early 1916, only 150 soldiers remained.⁴¹ With the outbreak of hostilities along the Mexican border and continued tensions there through the spring and summer of 1916, Vancouver Barracks again saw a build up of troops. By November, troops at the post totaled over 400 men.

U.S. Army Medical Care and Facility Development: 1918-1941

With the United States' entry into World War I, the Army Medical Department once again found itself facing overwhelming logistical problems in caring for large numbers of sick and wounded men. While important advances had been made in inoculations and control of communicable diseases, now large groups of city and rural men encountered each other for the first time as they congregated for training in military cantonments. The rural men had generally not been immunized against urban diseases, and thousands of them contracted mumps, measles, influenza, pneumonia and meningitis:

[Men] were shifted from camp to camp by thousands, taking with them such diseases as they were incubating, thus infecting all camps as

⁴⁰Quartermaster Form 117, Historic Building Records, Vancouver Barracks Engineering Office var. dates. See also Kristin Baron, "Vancouver Barracks Physical History Report," (Vancouver, Wash: Fort Vancouver National Historic Site, 1998).

⁴¹Erigeron, p. 287.

impartially as human ingenuity, or the lack of it, could assure.⁴²

In the months following the War's beginning a new medical crisis struck. In September 1918, as Army medical personnel struggled with a steady increase in cases of measles and mumps, a devastating influenza outbreak became fully epidemic.

Influenza and pneumonia swept through army camps, which were really crowded cities... the Medical Department was almost overwhelmed. Hospital facilities were inadequate and had to be enlarged by extemporized use of barracks, tents, and mess halls.... So rapidly did deaths mount that many camps were unable to prepare bodies for timely burial.⁴³

Army post hospitals, controlled by the post commander, were intended generally for the care of military occupying the installation during peacetime. These hospitals faced intense pressures with the onset of the World War I and new medical demands. Such technologies as x-rays required space in the hospital and skilled technicians. Many of the old post hospitals were too small, and some of the newer post hospitals were also too small. At posts where recent hospital construction had occurred, the relatively small number of Army troops regularly garrisoned at any time had resulted in smaller facilities.

...Post hospitals of such of such a compact nature...naturally and unavoidably presented many defects incident to all activities being present within the same structure. Among these faults may be mentioned the crowding together and close connection of the administrative portion, wards, kitchen, lavatories, etc., which should be separated one from the other.⁴⁴

Following the declaration of war in the spring of 1917, regular Army troops collected at posts for specialized instruction and training. In many instances large cantonments, with troops sheltered in tents, extended across military reservations. With populations far larger than normally found, most post hospitals were overwhelmed. As one historian noted:

The provision of additional hospital space for the sick of these troops was effected by the construction of temporary wards, mess halls, barracks, nurses quarters, or combinations of these of other hospital

⁴²Ashburn, p. 317.

⁴³Ashburn, p. 318.

⁴⁴Frank Weed, *Military Hospitals in the United States* (Washington, DC: US PO, 1923) p.

buildings adjoining the existing post hospitals...⁴⁵

Until a number of larger temporary hospitals appeared throughout the country, individual post hospitals necessarily expanded their facilities as best they could to treat the large numbers of military personnel under their care. As the war progressed, however, and the larger hospitals came into general use, the role of typical post hospitals in the care of the ill and war wounded remained relatively small. Management of the post hospital remained the same in war as in peacetime.

... The senior medical officer on duty at the post at which the post hospital was located discharged his duties in a dual capacity; he was post surgeon and he was also in direct charge of the hospital. ⁴⁶

Intensive demobilization and reorganization followed the Armistice in November 1918. Medical Department physicians at Army hospitals throughout the country worked to aid the soldiers who returned by the thousands. Although ill soldiers were routed through various larger general hospitals upon immediate return to the United States, many eventually entered post hospitals for extended care. One historian stated that "Ninety-eight percent or more of all these were to be returned to civil life in as good health as possible, to undergo physical examination and to have recorded their physical condition, particularly their disabilities."⁴⁷

In the meantime, physicians at Army posts treated wounds, broken bones and osteomyelitis and a variety of infectious diseases. While most of these cases could be treated in a relatively timely fashion, "There were three great classes of men who remained in Army hospitals for very long periods and required much care and attention. These were the tuberculous, the cases of emphysema following pneumonia and influenza, and the seriously disabled and mutilated war wounded."⁴⁸

As World War I neared its end, the American Red Cross assumed an important role in the care of military personnel. With an end to fighting, the organization struggled to redefine its purpose. No longer required for emergency treatment of soldiers in the field, the agency refocused on domestic issues, and extended its activities to rehabilitative care of soldiers. The Red Cross Bureau of Camp Service delegated to an expanded staff the duties of providing special service to military hospitals.

⁴⁵Weed, p.33

⁴⁶Weed, p. 388.

⁴⁷Ashburn, p. 375.

⁴⁸Weed, p. 378.

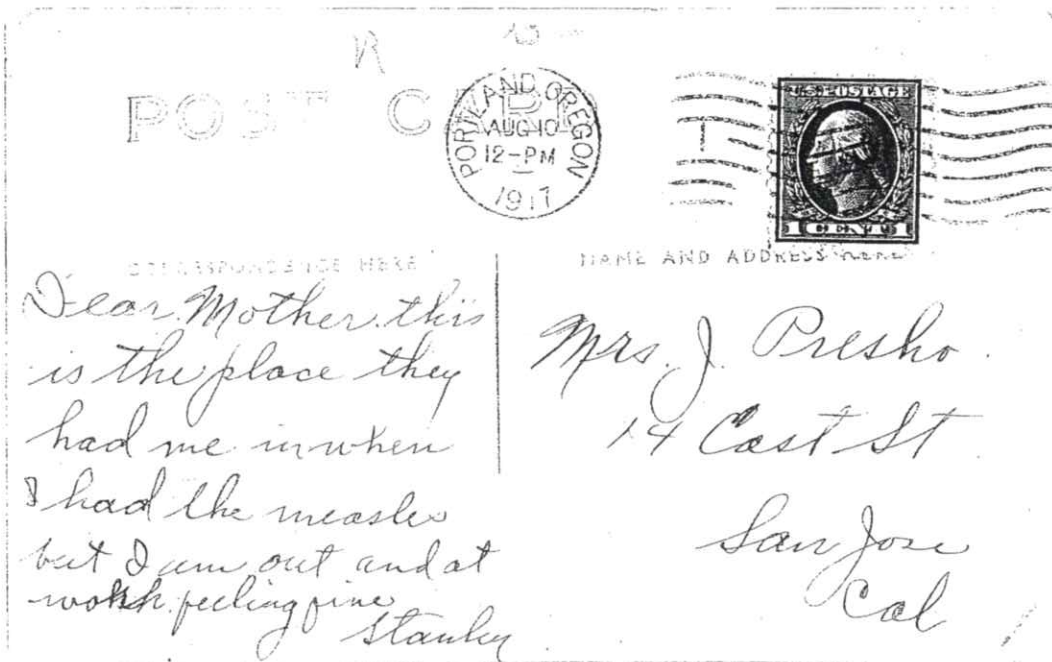


Figure 12 Post card from soldier in the 1905 Post Hospital.

After assessing the desperate needs of recuperating ailing servicemen, the Red Cross proposed erecting a series of convalescent houses around the country associated with both Army and Navy hospitals. The agency approached the Surgeon General of the Army who accepted the offer. On December 26, 1917, the Adjutant General authorized the Red Cross to build convalescent houses at all base and general hospitals in the country. One study notes that by June 30, 1918, fifty-two of the buildings had been completed nation-wide at a cost of \$1,069,385.50.⁴⁹ Red Cross materials in the National Archives RG 484 lists 92 Convalescent Houses built to four standard plans and some "Special" plans by the Red Cross on military bases before 1922. The Red Cross put administration of these facilities into the hands of the hospitals' commanding officers where the buildings essentially served as "extended wards of the hospitals, devoted to special care of convalescents."⁵⁰

The convalescent house offered a place for sick and wounded men who had been discharged from critical care in hospitals, but needed additional time to heal. With planned activities submitted to the hospital commanding officer for approval, Red Cross staff assisted the men by developing entertainment programs, providing games and teaching handicrafts, as well as assisting with personal services such as letter-writing and reading. The benefits and support offered the Army were recognized and appreciated. A Red Cross Annual Report for 1917-1918 noted:

Convalescent Houses have already proven to be invaluable. One need only visit... to realize the great value of such attractive, homelike centers where hundreds of convalescent patients spend the greater part of their waking hours. The library, the moving pictures, the entertainments presented by talent provided from nearby cities, the pianos, the writing tables and games, all combine to cheer and enthuse the convalescent soldiers.⁵¹

Despite the nation's overwhelming need for veteran care in the spring of 1918, slightly more than a year later the Red Cross was unable to obtain adequate funding for the convalescent house projects. Gradually, as veterans returned to civilian life, financial support for Red Cross programs waned. According to Ann James, who made an extensive study of Red Cross recreation programs in the post-World War I period, the agency ended construction and furnishing of the convalescent houses in 1919. The Vancouver Barracks facility was one of the last ones built. Within a short time, most of

⁴⁹Ann E. James, "American Red Cross: Therapeutic Recreation Service in Military Hospitals," (Unpub. Ph.D. dissertation, University of New Mexico, 1980) p. 17-19.

⁵⁰Weed, p. 166.

⁵¹Report quoted in James, p. 19.

these buildings ownership reverted to the military bases on which they stood. The Vancouver Barracks facility apparently remained a Red Cross building until 1934, however. Gradually Red Cross employees aided by volunteers focused recreational activities in only a few Army and Navy hospitals. Gradually, the agency transferred medical social service responsibilities to the United States Veterans Bureau.⁵²

The Veteran's Bureau, established by Congress in 1921, served as a civilian agency of the federal government. The agency's creation came about as a direct result of the large number of war veterans who needed extended nursing care for tuberculosis and psychiatric disorders. The following year, public health hospitals, where many veterans were treated, were assigned to the Veterans Bureau. During the rest of the 1920s the Veteran's Bureau acquired many Army hospitals.

In 1930 Congress enacted Public Law 536 authorizing the President to consolidate and coordinate government activities affecting war veterans into an agency to be known as the Veterans Administration. The agencies merged were the U.S. Veterans' Bureau, the National Homes for Disabled Volunteer Soldiers and the Bureau of Pensions of the Interior Department. Patients of the Veterans Administration at the time it was established included veterans of the Civil War, the Spanish American War and World War I. Few of these patients went to Veteran's Administration hospitals for treatment of acute difficulties. This was a trend that became more prevalent after World War II. Most patients entered the hospitals for extended periods of convalescent care. Increasingly the Veterans Administration built new hospitals or acquired older ones to strengthen the veteran care program.

During the 1920s construction and development at Army posts slowed. At the end of World War I, "when Congress returned responsibility for construction, including repairs, operation of utilities, and handling of real estate, to the Quartermaster Corps... retrenchment was the order of the day."⁵³ In 1927 small gains were made in an improvement program that began with approximately \$7 million appropriated for construction of hospitals, barracks, and other buildings. In subsequent years additional funds were allotted for renewed construction at various Army locations.

With the Depression, U.S. Army construction remained subdued during the 1930s. Although the ten-year Army construction program initiated in the previous decade continued to produce improvements at some Army locations in the early Depression years, substantial new funding came only as a result of the Emergency Relief and Construction Act of July 1932. That year over \$15 million was set aside for developing new housing at

⁵²James, p. 35. See also Foster Rhea Dulles, *The American Red Cross: A History*, (New York: Harper, 1950) p. 317-318.

⁵³Risch, p. 713.

Army posts. Late in the 1930s the probability of U.S. Army military involvement in Europe became apparent. Although not all Army installations would receive appropriation benefits, in 1937 the U.S. government approved additional funds for construction, described as "an authorization of \$25.5 million for work at 46 posts and stations during Fiscal 1938."⁵⁴

By 1938, at a cost of around a half-billion dollars, the Construction Division had accomplished a lot. It had provided permanent housing for 75,000 officers and men, ...built and enlarged several general hospitals; erected schools, laboratories, depots and memorials; and generally upgraded the Army's physical plant.⁵⁵

Hospital construction also increased at U.S. Army locations as the nation's impending military involvement became apparent. In August, 1940, the Surgeon General recommended construction of ten new general hospitals, ... "distributed around the country proportionate to troop distribution..."⁵⁶ Statistics given by David Clary, in his study of Army facilities and furnishings, indicate that between September 1940 and December 1941, beds in general hospitals increased from 4,925 to 15,533 beds and in station hospitals from 7,391 beds to 58,736 beds.

Medical Care and Facility Development at Vancouver Barracks: 1918-1941

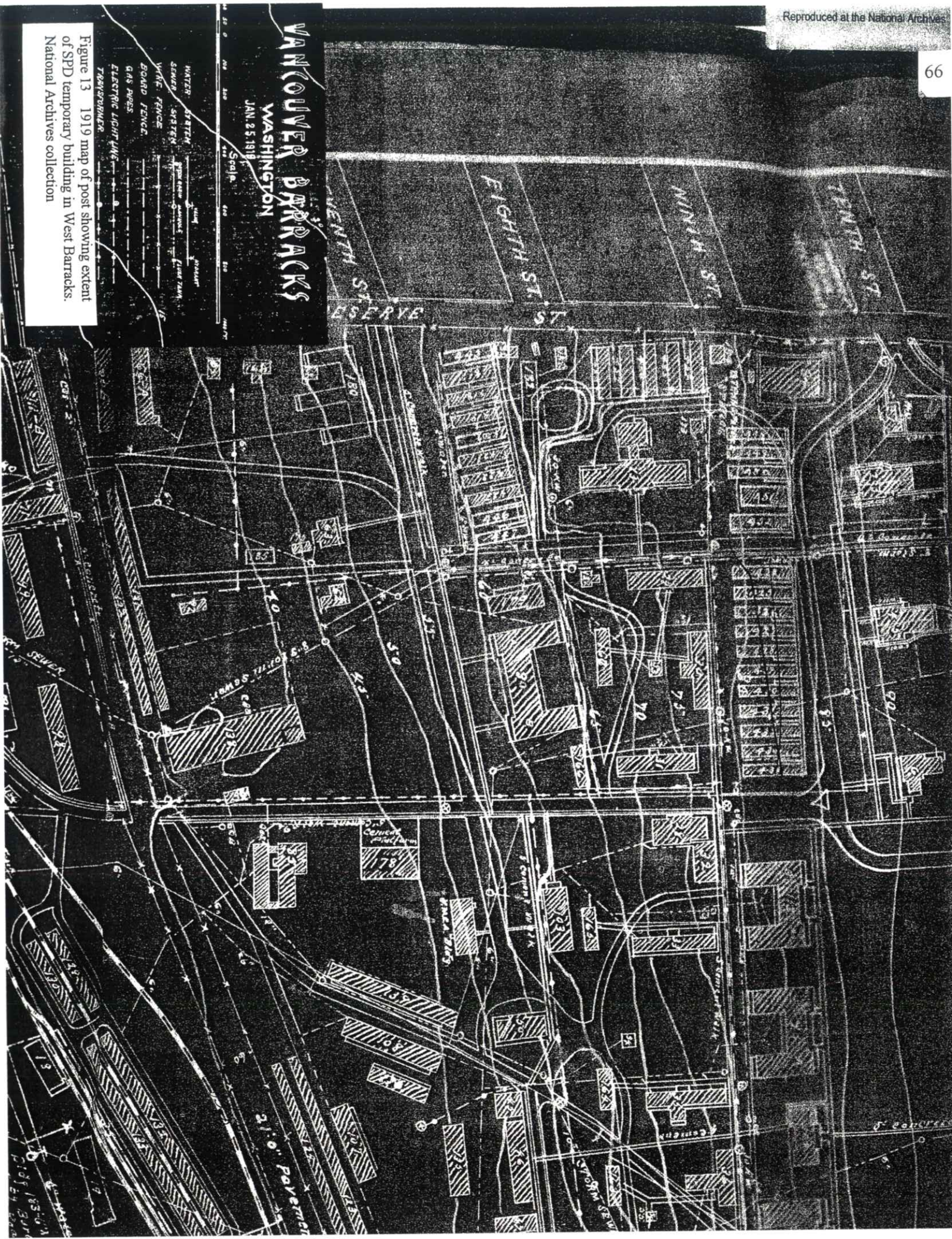
With the U.S. entry into World War I, men recently called into service as well as existing regular army personnel gathered at Vancouver Barracks where Army physicians examined them and administered vaccinations. At the Barracks the soldiers were assigned uniforms and equipment, divided into regiments, and trained. Although Vancouver Barracks remained relatively small in overall size, the large influx of troops preparing for transport overseas and the extensive Spruce Division operation lent the post an important military role in the Pacific Northwest.

Vancouver Barracks' importance in World War I military efforts had a significant effect on medical practice and facility development at the post. Faced with literally thousands of soldiers needing treatment during the years 1917 through 1919, medical staff leaders increased the space available for patient care, and provided what space they could for surgery, laboratory, and equipment storage. Supervisors of the Post Hospital organized carefully, emulating procedures adopted in larger military hospitals where the

⁵⁴Clary, p. 200.

⁵⁵Clary, p. 206.

⁵⁶Clary, p. 258.



commanding officer, Quartermaster's office, medical, dental, nursing, and convalescent representatives worked in close coordination. Army medical historian Frank W. Weed stated that most post hospitals made little effort to organize in the way of the "essential war hospitals," qualifying his appraisal by noting:

The exceptions to this statement include post hospitals that were operated at the large recruit depots and at other such places as Fort Jay, Fort Leavenworth, Fort Monroe, and Vancouver Barracks.⁵⁷

Despite attempts to run the hospital in an efficient manner, in February 1918, a committee of the Army and Navy Auxiliary of Portland investigated complaints that an inadequate number of trained nurses had lowered the standard of care at the Post Hospital. Responding to a telegram sent him by the committee, the Secretary of War intervened, requiring at least five additional women nurses to be stationed at the hospital.⁵⁸ The following month, after some members of the public voiced more complaints concerning conditions and treatment at the post, the mayor of the city of Vancouver appointed a committee to visit the post. The local newspaper reported:

Rumors and reports of bad conditions existing at the Army cantonment at Vancouver are without foundation, according to a detailed report made yesterday to mayor Baker by the war auxiliary central committee...2500 men are stationed at the post and 5000 at the cantonment. We found 391 men in the hospital...most of the sickness being measles, mumps or chicken pox.

We went through all parts of the hospital wards...and also through the overflow wards, which are in tents, all floored and well heated. In these outside wards only convalescent or mild cases are kept... the hospital is well supplied with competent nurses.⁵⁹

Weed's study of specific post hospitals throughout the United States during the World War I period indicates that the Army constructed a thirty-seven bed temporary nurses' quarters and mess building at Vancouver Barracks in 1917. With an expanded bed capacity of 356, the Post Hospital treated a tremendous number of patients between April 1917 and December 1919. Army statistics give the following information concerning patient population and care at Vancouver Barracks. Admissions during the period totaled 21,617 with a maximum monthly number of patients treated at 2,556, and a minimum of 8. Of those treated, 12,417 were returned to duty, 228 died, 8,972 were released under other circumstances. Medical personnel numbers during the period totaled

⁵⁷Weed, p. 388.

⁵⁸*Oregon Daily Journal*, Feb. 25, 1918, p. 14.

⁵⁹*Portland Oregonian*, March 16, 1918, p. 7.

seventeen Medical Corps officers, 134 Medical Department enlistees and 15 nurses.⁶⁰

Vancouver historian Van Arsdol cites a temporary rise in hospital bed capacity to 500 and the construction of temporary wooden wards nearby with the influenza epidemic in the fall of 1918 (see Figure 13). From October through December, hospital staff packed the corridors with beds, took over available barracks space, and pitched tents for convalescing soldiers. The hospital kitchen prepared liquid as well as traditional diets. Military personnel changed linens, obtained medical supplies, and handled patients' clothing and personal effects. Family members gathered at the hospital seeking information about their loved ones. Exhausted workers struggled around the clock to receive and treat the ill and then fell ill themselves. City of Vancouver mortuaries provided assistance, but were soon overwhelmed handling military as well as civilian deaths. The steadily rising number of deaths at Vancouver Barracks required the construction of a new morgue (Building 602) near the Post Hospital. Gradually the crisis abated, leaving a devastating toll of misery and death among civilian and military personnel. Vancouver Barracks hospital continued to serve soldiers at the post through the duration of the war.⁶¹

In November 1918, shortly before the signing of the Armistice agreement, Red Cross and U.S. Army officials gathered in front of the Vancouver Barracks Post Hospital to lay the cornerstone for the new Red Cross Convalescent House. Heading up the ceremony was Major Percy A. Smith, official head of the Red Cross with the Spruce Division. In announcing the ceremony, the newspaper observed that the new facility would function "to take care of soldiers after they are discharged from the sick and surgical wards of the Post Hospital... the building will be an adjunct of the large hospital."⁶² Plans for the convalescent house called for spaces for the recuperating soldiers including a library, theatricals, indoor games, dances, outdoor activities such as gardening, and exercise. Staff facilities included administrative offices, a kitchen, and a bedroom for the field director.

On February 15, 1919, the commodious new building was completed and ready for dedication at Vancouver Barracks. The reporter describing the ceremony noted that "...the large building was constructed without one cent of profit accruing to anyone.. the furniture also was obtained at cost."⁶³ Dignitaries attending the ceremony included the post commander, the medical officer in charge of the Post Hospital, and the local administrator of the Red Cross program at Vancouver Barracks. After several speeches,

⁶⁰Weed, p. 396-397.

⁶¹Van Arsdol, 1999.

⁶²Portland *Oregonian*, November 7, 1918, p. 10.

⁶³Portland *Oregonian*, February 17, 1919, p. 7.

Major Smith of the Red Cross who had overseen the building's construction and who would have charge of its operation, received a symbolic key to the \$25,000 building.

Reporting on the dedication ceremony, an area newspaper described the handsome grounds laid out by D.M. Thielen, landscape architect of Portland, and the "many evergreens and shrubs given by the City of Portland."

... The Red Cross building is located in front of the administration building of the post hospital, and is permanent. It is in its first inception a place for the entertainment of the convalescent soldiers and is part of the army hospital. It is also used as an administration center for the field director and staff of the Red Cross organization and other activities allied, including the federal board for vocational education.⁶⁴

The Red Cross Bulletin for the northwest division further described the Vancouver Barracks Convalescent House as:

....constructed on the old American colonial style, full concrete basement, stucco walls and painted a rich cream color, restful to the eye... The sun room has unusually fine coloring, tending to stimulate the convalescent men with a desire for renewed health and strength. The furniture is made of willow by a Portland willow craft shop.⁶⁵

Within months after completion of the fine new building, the Red Cross struggled to maintain funding for the Vancouver Barracks Convalescent House. Records indicate that at this time the organization's leaders and the post's commanding officer corresponded regarding future use of the building. The Red Cross indicated that they no longer needed the building but believed it could continue to be used by the post. Army representatives replied that the primary conceivable use – as a service club – was not needed at the time due to the small size of the garrison. One researcher's examination of the correspondence indicates that the Army proposed "mothballing" the building until there were enough soldiers for a second club.⁶⁶

Through the 1920s a series of military units transferred in and out of Vancouver

⁶⁴Portland *Oregonian*, February 17, 1919, p. 7. A similar but larger Red Cross Convalescent House was opened on February 23 at Camp Lewis.

⁶⁵*Bulletin of the American Red Cross Northwestern Division*, February 22, 1919. The Vancouver *Daily Columbian* of February 15, 1919, described the sun room as a "riotous mass of beautiful coloring."

⁶⁶Baron, p.3.

Barracks. Activity slowed at Vancouver Barracks and according Van Arsdol, the hospital bed capacity reached a low during the 1920s when extra wards were used to store medical equipment.

The Depression era of the 1930s brought more changes to Vancouver Barracks. Development at the hospital occurred as a series of alterations and improvements. Building records indicate that major improvement projects accomplished between 1930 and 1940 included the enclosing of the south end porches, installation of a new steam heating plant, installation of over a hundred new windows and three entrance doors, and complete repainting of the exterior, and substantial painting of the interior. Changes occurred also at the Red Cross Convalescent House. Porches were enclosed, and the ceiling of the main room raised to accommodate movie projectors. Army construction and maintenance records indicate that in October 1934 the building's designation was changed from a Red Cross building to a service club.

Additional use of the post's medical facility came with the Civilian Conservation Corps. The government authorized the use of military hospitals, medical officers, and dental services for CCC enrollees in May of 1933. In response, General George Marshall, post commander in the 1930s, assigned staff to oversee medical and dental care of Civilian Conservation Corps enrollees.⁶⁷ The CCC later built its own temporary hospital, behind (west of) the Post Hospital.

In 1940, an increasing number of veterans requiring medical care as well as heightened military preparation with the outbreak of war in Europe resulted in Army plans to construct a new hospital at Vancouver Barracks. The new facility would be devoted to care of former military personnel throughout the region. In announcing construction, the *Portland Oregonian* stated that the new, "750-bed cantonment-type hospital... would be used in connection with existing hospital facilities at Vancouver barracks."⁶⁸ The new Barnes Hospital was complete in April 1941 and several Medical Corps personnel from the old Post Hospital transferred to the new facility, "More than 90 nurses were scheduled to move in, along with 400 enlisted men and 53 officers..."⁶⁹ For the next five years the older Post Hospital and the new Barnes Hospital operated in cooperation with each other.

In early 1946, plans for Vancouver Barracks were thrown into limbo when the military announced plans to abandon the post after it was declared excess in January of that year. With the Army scheduled to leave the installation on April 30, 1946, Barnes Hospital, with a post-war increase to 2000 beds, would be vacated. On August 1, 1946,

⁶⁷Rose, 1999.

⁶⁸November 28, 1940, p. 1.

⁶⁹Van Arsdol, 1999.

the Veterans Administration acquired Barnes Hospital from the War Department, sustained the hospital's operation, and began a new chapter for the Vancouver medical facility.

Historic Personages Associated with the Medical Theme: 1880-1910

Franz Feinler, in his manuscript "Military History of Vancouver Barracks" (1911) reports the following sequence of Post Surgeons for the Department of the Columbia period, 1880-1910.

John M Dickson	Oct. 7, 1880
Charles L. Hergman	Sept. 24, 1881
Francis L. Towne	Feb. 8, 1883
Edward B. Mosley	Aug. 28, 1884
R.S. Vickery	Sept. 29, 1884
Edward B. Mosley	Jan. 8, 1886
William E. Waters	Nov. 21, 1886
Henry S. Kilborne	July 16, 1887
Williams E. Waters	August 19, 1887
Henry S. Kilborne	June 19, 1888
William E. Waters	July 7, 1888
Henry S. Kilborne	Dec. 18, 1888
Willaim J. Wakeman	Jan. 24, 1889
William E. Waters	Feb. 12, 1889
Henry S. Turill	Sept. 28, 2890
William E. Waters	Oct. 18, 1890
Bernard J. Irwin	Nov. 26, 1890
Marcus E. Taylor	Dec. 26, 1890
T.U. Raymond	March 14, 1892
William H. Arthur	April 29, 1892
Rudolph G. Ebert	June 24, 1895
John Van R. Hoff	Dec. 9, 1896
John S. Kulp	April 14, 1897
John Van R. Hoff	May 10, 1897
Fred P. Reynolds	April 28, 1898
Louis Brechemin	May 23, 1898
Louis R. Dawson	June 23, 1898
James N. Pocock	July 23, 1898
John D Yost	Sept. 16, 1898
Rudolph G. Ebert	Oct. 27, 1898
Jere B Clayton	March 10, 1900

Louis S. Tesson	July 7, 1900
Jere B Clayton	July 21, 1900
Louis S. Tesson	Aug. 4, 1900
Henry R. Carter	May 12, 1901
Harry L. Gilchrist	June 20, 1901
Joseph B. Girard	July 21, 1901
Rudolph G. Ebert	Oct. 21, 1901
Harry L. Gilchrist	Sept. 15, 1902
Rudolph G. Ebert	Oct. 6, 1902
Arthur W. Morse	Dec. 13, 1903
Rudolph G. Ebert	Jan. 11, 1904
Robert L. Richards	July 10, 1905
Rudolph G. Ebert	July 14, 1905
Charles E. Flagg	Dec. 28, 1905
Robert L. Richards	April 20, 1906
Charles E. Flagg	June 11, 1906
William D. Crosby	June 21, 1906
Herbert G. Shaw	June 1, 1907
Alexander N. Stark	Oct. 2, 1907
Edmond W. Bayley	July 15, 1908
Alexander N. Stark	August 31, 1908
Herbert G. Shaw	Dec. 15, 1908
Alexander N. Stark	Jan. 29, 1909
Herbert G. Shaw	Dec. 14, 1909
Alexander N. Stark	Dec. 17, 1909
Herbert G. Shaw	Dec. 19, 1909
Alexander N. Stark	Jan. 29, 1910
Herbert G. Shaw	March 1, 1910
Alexander N. Stark	March 5, 1910
Robert H. Pierson	June 20, 1910
Jere B. Clayton	July 1, 1910
Robert H. Pierson	August 1, 1910
Jere B. Clayton	August 20, 1910

It is interesting to note the brief periods of each appointment. It is also interesting to note the extent to which several Surgeons rotate through multiple appointments. This suggests that there were a number of available candidates for the position among the medical officers on the post at any time. This situation would seem to create a discontinuity of administrative effort unless all of the post's physicians shared a common management style and agreed about administrative issues.

Significance of the Medical Service Theme

The medical services complex at Vancouver Barracks during the period of the West Barracks buildings (1880-1941) has the following three claims to significance:

- A) The Post Hospital and the other medical services buildings at Vancouver Barracks exemplify the development of Army medical services during their period. The Post Hospital is an example of state-of-the-art military medical thinking when it was built, and the same is true of the Red Cross Convalescent House and to a lesser extent, the Dental Surgery.
- B) The medical complex at Vancouver Barracks was one of the busiest in the nation during the World War I period, with 21, 617 admissions.
- C) The five buildings associated with the medical services theme offer a respectable level of integrity. All of the medical services buildings have been modified since their period of significance. The Hospital (Building 614) has had its wing wards enclosed, and the rear portion of the building has been moved to the front. The Dental Surgery (Building 626) and the Hospital Steward's Quarters (building 631) have been modified with additions. The Hospital Steward's Quarters and the Hospital Sergeant's Quarters (Building 621) have been moved. The Red Cross Convalescent House has had its porches enclosed and has had major interior modifications. Despite these modifications, the character-defining features and the design elements of the major elevations remain adequate for interpretation. This is not the case with most military medical services buildings of the 1880-1941 period. Because Vancouver Barracks was declared surplus in 1946, there has been less modification than would have been the case at a more active post.

In short, the Vancouver Barracks medical center was one of the most active in the nation during the first World War. The major buildings that provided service during this period are still extant and offer reasonable integrity for interpretation.

The level of integrity of the medical services buildings is an issue that merits a little more discussion. *National Register Bulletin 15* defines "integrity" as the "ability of a

property to convey its significance” through the “Seven Aspects of Integrity.”⁷⁰ These are location, design, setting, materials, workmanship, feeling, and association. A building that has been moved has compromised the “location” criterion; similarly, a building that has been modified has compromised the “design” criterion. To some extent, all five buildings have been compromised in these areas.

However, the remaining criteria of “setting,” “association,” and “feeling” are also important. Here the medical services buildings display a high degree of integrity because they remain together as a functional ensemble. The three major buildings occupy their historic positions, and there are no newer buildings that intervene. The hospital administrators’ quarters are moved from their original locations, but they are still located in close proximity to the Post Hospital, which was their historic setting. The two barracks buildings (607 and 638) and the two service buildings (630 and 628) are not part of the medical services theme, but they also occupy their historic positions from the World War I period. In effect, then, the integrity of any single building may be compromised, but taken together in their setting, the buildings offer a remarkable glimpse of their period and function.

⁷⁰Patrick W. Andrus and Rebecca H. Shrimpton, *National Register Bulletin 15: How To Apply the National Register Criteria for Evaluation* (Washington DC: US GPO, n.d.) p. 44-45.

THEME III: THE SPRUCE PRODUCTION DIVISION, 1917-1919

Aircraft for the War and Spruce for Aircraft

The United States entered the European war in April, 1917 convinced that an injection of fresh military forces and the additional industrial capacity would bring a swift resolution to the "stalemate in the trenches." This was true, of course, but the situation was complicated by several factors. The U.S. military needed some time to mobilize and to staff up, and American industrial producers were not necessarily producing the right products for the war.

One of these products was aircraft, which was recognized as a technological solution to trench warfare. Aircraft could fly over the lines, bomb the enemy, and return to base. For aircraft in 1917, lumber was required as the structural element on the airframe. This lumber needed to be flawless, light, and fantastically strong. The best material was Sitka spruce, which was available on the coastal forests of Oregon, Washington, British Columbia, and Alaska. Sitka spruce was plentiful and trees were large and old, so they yielded a high percentage of lumber that was free of knots or defects. This quality was absolutely essential for airframe construction. During the winter of 1916-1917, the Europeans discovered Sitka spruce and placed large orders for this material with west coast lumber manufacturers. West coast spruce prices rose, stocks went down, and by midwinter, 1917, one mill manager reported that "there is an unlimited demand for Sitka spruce at exceedingly high prices."⁷¹

⁷¹*The Timberman*, January 1917, p. 35/

The problem was that Sitka spruce was not much good for anything except aircraft material and the west coast mills were not oriented to spruce production. What little Sitka spruce was cut into lumber was used to make vegetable or fruit boxes, or for piano sounding boards--the first product was too common to be lucrative, and the second too specialized. Before the war, U.S. spruce production was concentrated in the Appalachian states (72.5%), with the west coast (16.5%) and the lake states (7.5%) a distant second and third.⁷² In addition to being unprofitable, west coast Sitka spruce was inconvenient to log.

Ralph W. Burnside, president of the Willapa Lumber Company in Willapa Bay, Washington, summarized the situation spruce producers faced:

Spruce is really a by-product of our other woods, and can as a rule only be produced only as it comes in with cedar, fir, or hemlock. There are some small tracts of timber along the coast where spruce predominates. The greater proportion of the spruce on these lowland tracts is of inferior quality, so that only a very small percentage of upper grades [of lumber] is produced from it. Growing in with this spruce is a very inferior quality of cedar and hemlock which must be logged at the same time as the spruce. By the time the logger or mill man disposes of the low grade cedar and hemlock ... and 50 percent of the spruce for box lumber, he begins to realize that he needs a very fancy price for the shop lumber and aeroplane stock which remains.⁷³

The Summer of 1917

By the summer of 1917, the U.S. had established an Aircraft Production Board, which in turn had established a War Emergency Spruce Council made up of west coast spruce producers. This body was charged with the task of procuring 100,000,000 board feet of clear spruce lumber during the next four months. The lumbermen in turn formed the Pacific Aircraft Spruce Production Board to try to meet the demands of the War Emergency Spruce Council.⁷⁴ The American aircraft manufacturers could not use this amount of spruce, of course, since they were not yet capable of producing aircraft on a war-time scale. Throughout the war, 70% of the spruce would go to aircraft factories in Europe.

⁷²U.S. Bureau of Corporations, *The Lumber Industry*, vol. II (Washington DC, US GPO, 1914), p. 682.

⁷³*The Timberman*, January 1917, p. 36.

⁷⁴*The Timberman*, August 1917, p. 31.

During normal times, a rush order for 100,000,000 board feet of a relatively obscure product would have been difficult for the west coast lumber industry to meet. The industry was by nature fragmented and characterized by what U.S. Forest Service Assistant Forester William B. Greeley called "competition in manufacture [that] is not only keen but often destructive." Especially in the west, Greeley noted, "excessive mill capacity, poor financing, and low average efficiency in manufacture and marketing add to its weakness."⁷⁵

The early World War I years were also years of labor activism and radicalism throughout the western states. The radical and often disruptive Industrial Workers of the World (IWW) enjoyed a solid following among the "homeless, womanless, voteless migratory workers in the West," particularly in the agricultural, mining, and maritime trades.⁷⁶ The IWW organized the loggers in the Great Lakes region and then moved into the logging camps and mill towns of the western states during the first decade of the century.

Other west coast labor groups active at the time included the shingle weavers unions in the Puget Sound mills and the several American Federation of Labor loggers' and mill workers' locals. As the west coast lumber industry prepared for the war, the labor groups prepared for a conflict of their own. On March 5 and 6, 1917, the IWW organized the Lumber Workers Industrial Union in Spokane. The organizing convention included a demand for better wages, improved camp conditions, and an 8-hour working day. The convention also set a strike date for July unless their demands were met. The shingle weavers convened in May and made similar demands, with a July 16 strike date, and the American Federation of Labor International Union of Timber Workers joined them.⁷⁷

The stage was set for a major confrontation between the west coast lumbermen and the workers, and on July 16, the strike began. By August 1, no more than 15% of the mills were running. The result was a rare combination of forces: the workers saw their best chance for improved working conditions at hand, the lumbermen saw their opportunity for war profits slipping away, while political and military authorities watched the production of lumber for ships, aircraft, and cantonments slow to a trickle. Neither the workers nor the lumbermen were prepared to compromise; they had been at each others' throats too long. Each side turned the strike into a political showcase. The industry spokesmen indulged in shameless red-baiting:

⁷⁵W.B. Greeley, *Some Public and Economic Aspects of the Lumber Industry*, (Washington DC: US GPO, 1917) p. 4.

⁷⁶Vernon Jenson, *Lumber and Labor*, (New York: Farr and Reinhart, 1945) p. 106.

⁷⁷Jensen, p. 125.

At close range it appears that the powerful, unseen, foreign hand, which has directed this campaign of industrial unrest, is bent solely on the destruction of the social fabric. When the entire facts are known this country will be shaken to its very depths.⁷⁸

The IWW, for its part, opposed capitalist wars and took the opportunity to raise the workers' consciousness about political as well as industrial matters:

I love my flag, I do, I do,
Which floats upon the breeze.
I also love my arms and legs,
And neck, and nose, and knees.
One little shell might spoil them all.
Or give them such a twist,
They wouldn't be of use to me;
I guess I won't enlist.⁷⁹

When the summer was over, the season's production of aircraft spruce stood at 300,000 board feet instead of 100,000,000⁸⁰ The lumbermen and the workers each held the other side responsible for the debacle, but by then assigning the blame was no more than a symbolic gesture.

The Army's Response to the Summer of 1917

When the lumber industry failed to meet spruce production goals, the Army formed the Spruce Production Division in the fall of 1917. Col. Brice P. Disque was placed in command. Disque opened headquarters in Portland and pursued an initial policy of counseling the industry, much on the model of other wartime co-operations between industrial groups and the government. When free markets could not do the job, the government was prepared to intervene, but caution was called for in the initial stages, at

⁷⁸*The Timberman*, July 1917, p.1.

⁷⁹R.L. Tyler, *Rebels in the Woods: The IWW in the Pacific Northwest*, (Eugene: University of Oregon, 1967) p. 117.

⁸⁰Gail F. Evans and G.W. Williams, "Over Here, Over Here: The Army's Spruce Production Division During 'The War To End All Wars'." (Port Angeles: Olympic NF, 1984), p.5.

least. Disque's first level of action established the following goals.⁸¹

- (a) To impress upon industry the urgency of speed in production
- (b) To instruct in careful manufacture
- (c) To stabilize prices
- (d) To encourage new development
- (e) To determine the value and possibility of riving spruce [This means splitting the logs before transporting them, to save weight]

After a brief period, the complexion of the relationship changed: the Army concluded that the industry could not expand to meet the Government's requirements and that the government must take steps to supplement the output of the industry. This led to the next step:

It was found early in October [1917] that mills were not equipped to cut to grain and that much valuable spruce was being spoiled. A cut-up plant to operate at Vancouver Barracks, under the charge of the Division, was decided upon.

And to the next step:

Enlisted men of the draft were asked to volunteer for duty in logging camps and 34 squadrons were organized by January 16, for this purpose.⁸²

By the end of 1917, then, the Army had entered the west coast lumber industry not simply as a regulating force in chaotic time, but as a factor in the industry, assigning labor, building mills, and eventually buying timber land. Folk humor records that Disque "came to see and stayed to saw." The result was one of the most unusual and controversial actions of the military during the war.

When he was assigned to the Spruce Production Division, Col. Brice P. Disque was arguably the only man in the Army who was capable of succeeding in the two objectives that the SPD had. These were to produce aircraft-quality spruce and to solve the west coast lumber industry's labor problems so that the spruce could be produced. Early in his career, Disque had distinguished himself in the Philippines by building an Army maintenance group into a thriving contracting business. Later, as a civilian, he ran the training programs and industrial services of the Michigan State Penitentiary so well that the prison actually made a \$371,000 profit in one year for the state.

⁸¹ Colonel Brice P. Disque, "Historical Report" in Disque Papers, University of Oregon Archives, p.2.

⁸²Disque, p. 3.

The Spruce Production Division's role in stabilizing the west coast labor situation was established even before the SPD was formed. General Pershing, commander of the Allied Expeditionary Forces, summoned Disque to Washington DC in May of 1917 to discuss the proposed assignment. Pershing had become concerned about the west coast lumber situation. Since the American military would be supplied in part by wooden ships, and since wooden airplanes were held as the best hope for moving the war beyond the trenches of France, Pershing's concern was not unreasonable. If the west coast industry was unable to produce lumber the war effort would suffer; worse, if the west coast radicalism was successful, the "infection" might spread to other parts of the country.⁸³

The Spruce Production Division and Vancouver Barracks

During his initial investigation of the spruce problems Disque had made Portland his field headquarters. This was a good choice, because Portland was the geographical and cultural center of the lumber industry. Disque met with industry and labor leaders in Portland, toured mills and shipping facilities, and then returned to Washington DC to report on his findings. The Spruce Production Division was created on November 15, 1917. Five days later, 105 officers who were to be the leaders of the Division assembled at Vancouver Barracks, which had been chosen to become Division Headquarters.

Ten of the officers were detailed at once to organize the Loyal Legion of Loggers and Lumbermen. This government-sponsored organization would be Disque's answer to the radical unions. Disque then established the Cantonment at Vancouver Barracks to house SPD offices and activities. Later the entire post was placed under Disque's command, and Colonel C.W. Van Way was appointed Post Commander under Disque. Then Disque established the SPD Medical Department, with the Vancouver Post Hospital as headquarters. Colonel Rudolph G. Ebert commanded that Department. Colonel Ebert had been at the Post Hospital for at least 15 years, serving as one of the rotating Chief Surgeons. He was the Chief Surgeon when the hospital was completed in 1905.⁸⁴

In its short life, the SPD provided labor in logging camps and lumber mills, built and operated 13 logging railroads, condemned and purchased timber lands, and built two lumber mills of its own. The two SPD mills were located at Toledo, Oregon, and at Vancouver Barracks. The Toledo mill was a conventional saw mill, but the Vancouver mill was a re-manufacturing plant or, as the Army called it, a "cut-up" mill. This means that the spruce logs were first cut at other mills into cants or large square timbers and

⁸³H.M. Hyman, *Soldiers and Spruce: The Origins of the Loyal Legion of Loggers and Lumbermen*, (Los Angeles: Institute of Industrial Relations, 1963) p. 35ff.

⁸⁴For an account of the organization of the SPD, see [E.H. McCollister and R.S. Gill], *History of the Spruce Production Division* (Portland, 1917).

then they were shipped to Vancouver to be finished into airplane stock. This two-step operation was uncommon but by no means unknown in the lumber industry, where it is conventionally called "milling-in-transit." The advantages are that the logs do not have to be shipped the whole way from the woods to the mill. The first mill reduces the logs to usable lumber, then the second mill finishes the lumber to high-value product with little waste. Since aircraft spruce required rigid quality control, Disque felt that he would have the best success by doing his own final milling.

Vancouver was centrally located in the spruce area, and it had excellent rail service. Vancouver Barracks would be convenient for housing the mill workers, who would be soldiers and who would number 6,000 men working 3 shifts each day. The mill had a designed capacity of 400,00 board feet/day, but it reached (and sustained) a production level 1 million board feet/day by August of 1918.⁸⁵

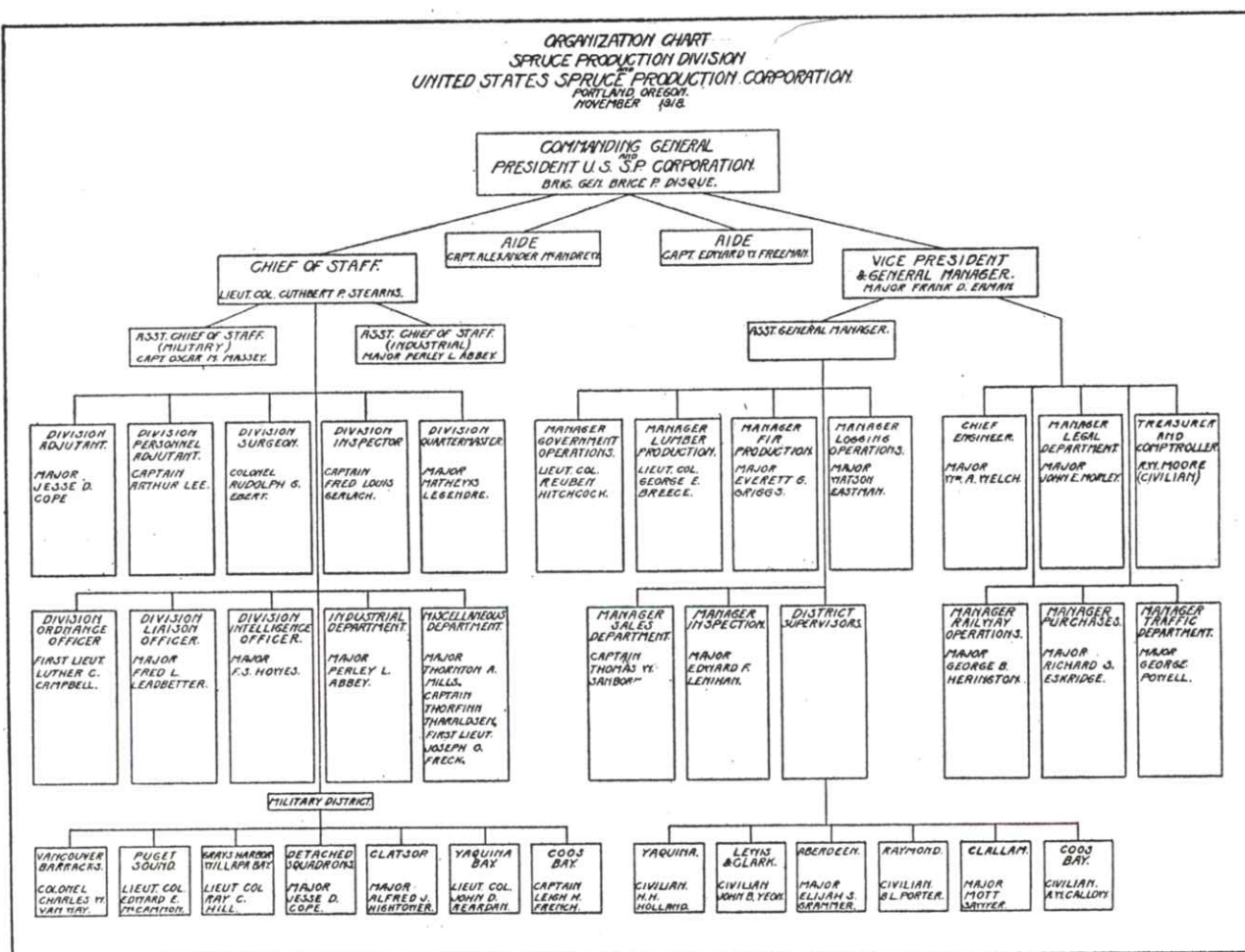


Figure 14 Organizational chart of
Spruce Production Division

⁸⁵ McCollister and Gill, p.48.

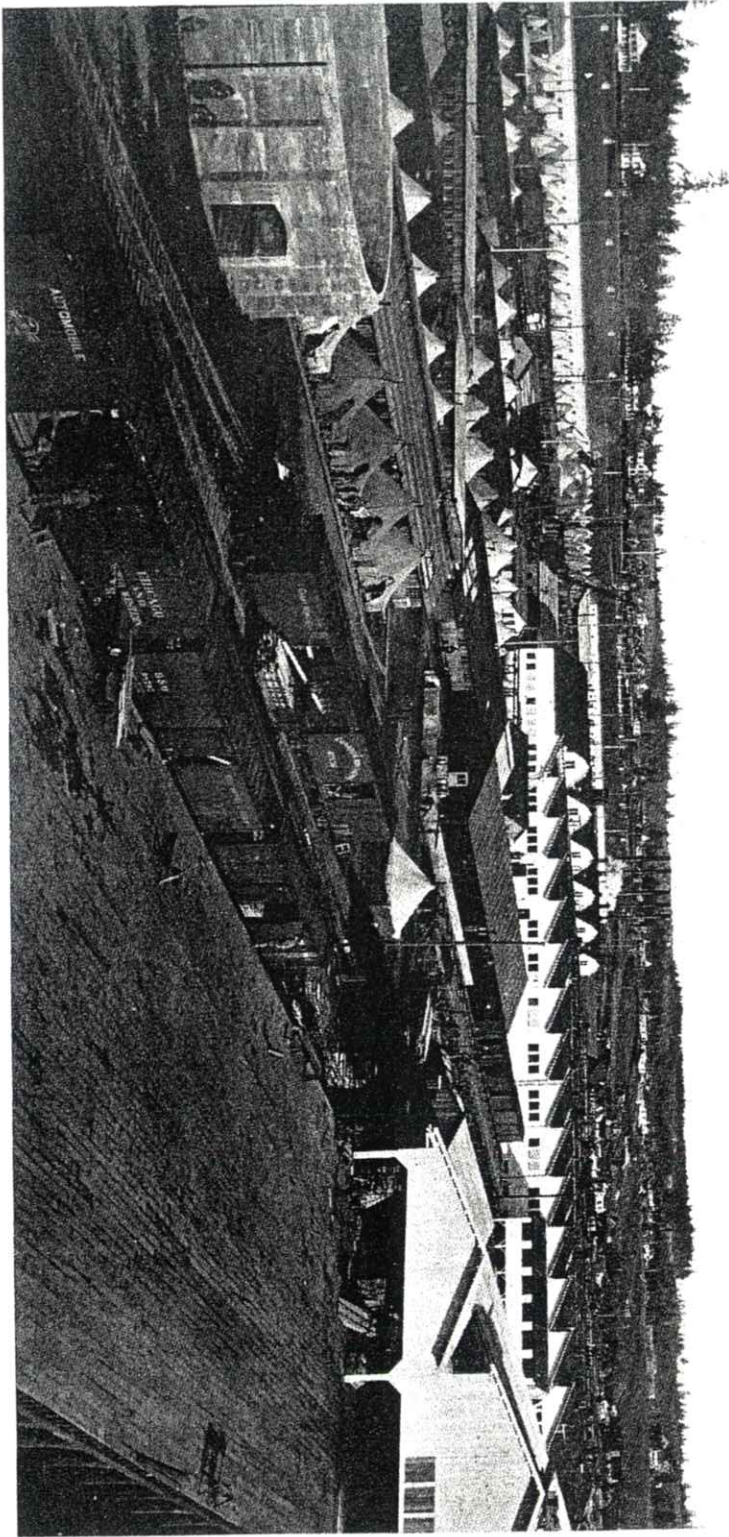


Figure 15 SPD mill complex with burner base in the foreground National Archives collection

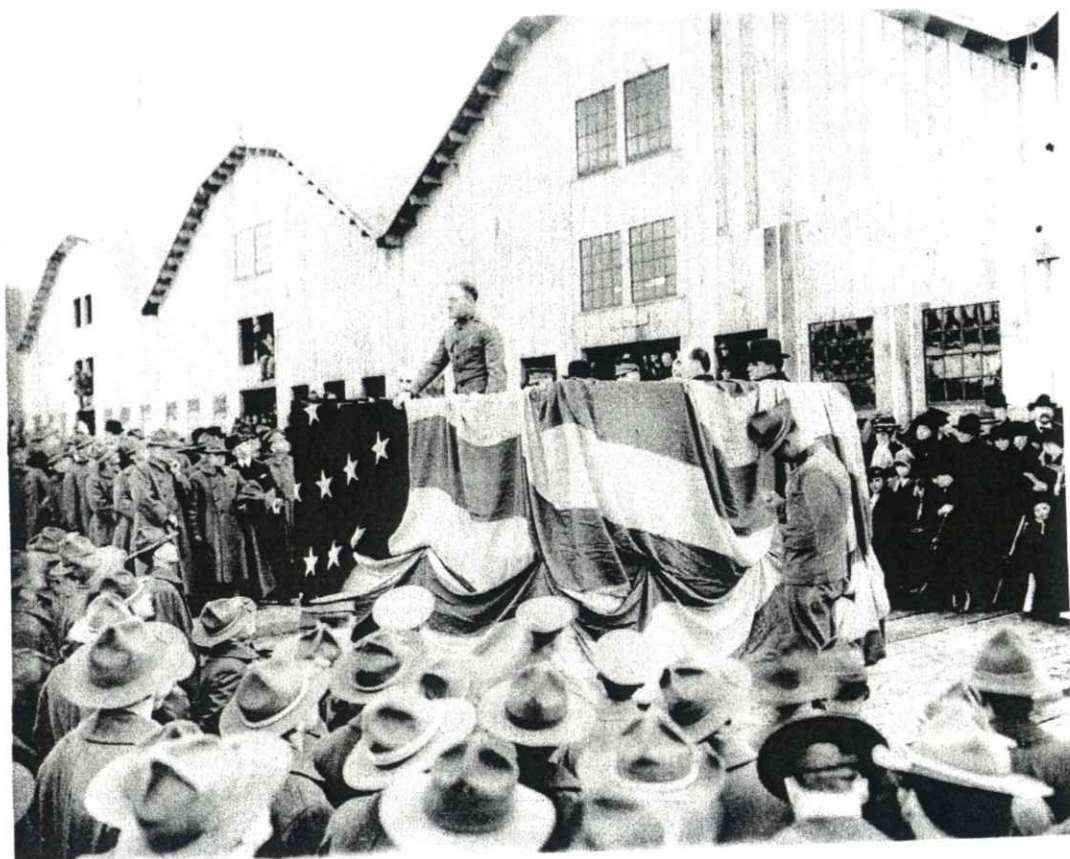


Figure 16 Major Reordan speaks at opening of SPD mill. Trust collection

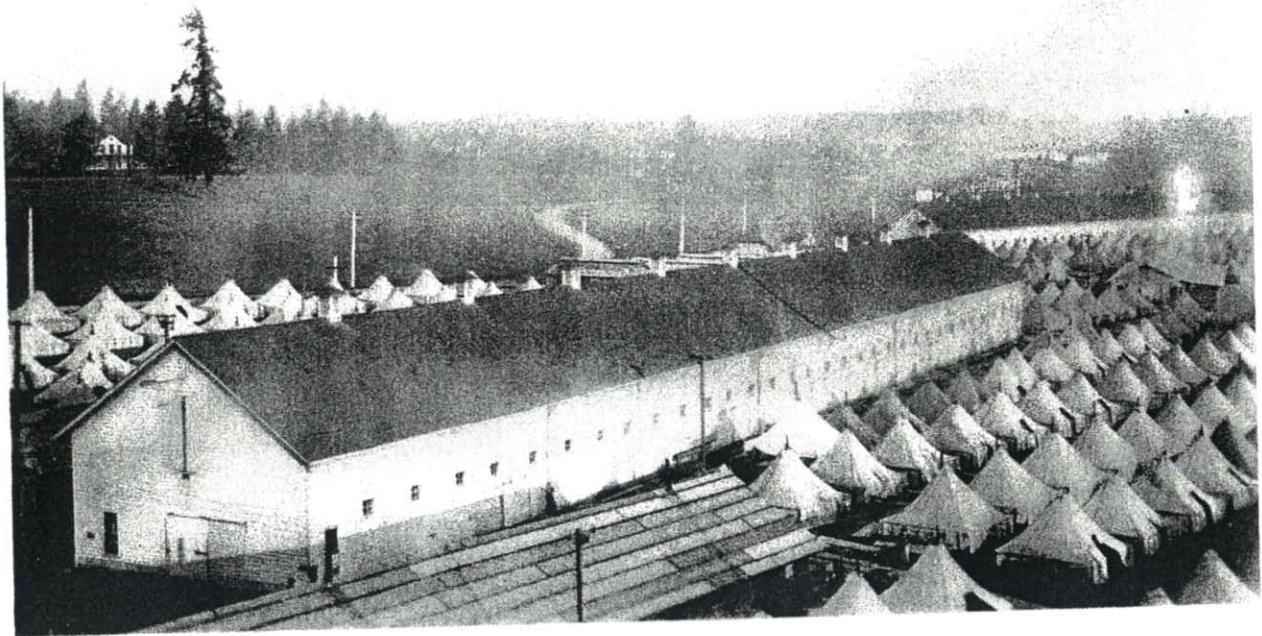


Figure 17 SPD cantonment at Vancouver.
Troops were housed in temporary buildings
and in squad tents Clark Co. HS collection

Solving the Labor Problem

Disque attacked the radicals on three fronts. First, he put soldiers into the camps and mills to undermine the threat of a strike. Then he established the 8-hour day and improved health and safety conditions so that the radicals would lose their strongest arguments. Finally, he created the Loyal Legion of Loggers and Lumbermen as a surrogate union which included both management and labor.

The first strategy was the most direct and was no doubt effective. There could be no strike if there was no shortage of labor, and the soldiers were available in unlimited numbers. Oregon lumber companies employing SPD soldiers included the following:

Table 6: Oregon Lumber Companies Employing SPD Soldiers⁸⁶

Company	Location	Spruce Producer
Astoria Box Co.	Astoria	yes
Booth-Kelly Lumber Co.	Eugene	no
Bridal Veil Lumber Co.	Bridal Veil	no
Buehner Lumber Co.	North Bend	yes
Hammond Lumber Co	Seaside	yes
Larkin-Green Lumber Co.	Blind Slough	yes
Nehalem Timber	Scappose	yes
H.E. Noble Logging	Seaside	yes
North Bend Mill	North Bend	yes
Oregon Pacific	Astoria	yes
Prouty Lumber	Seaside	yes
Smith-Powers Lumber	Powers	yes

⁸⁶Evans and Williams, p. B3.

Two of these first mills to receive SPD workers were not traditionally involved in cutting spruce. Booth-Kelly was a fir-producing complex of several mills located in the southern Willamette Valley. Bridal Veil was also a fir producer with a mill located in the Columbia Gorge and timber on the slopes of Larch Mountain. Neither of these firms had access to spruce on their own timber lands, and neither had logging railroads that reached spruce country. They were large and highly visible in the industry, however, and Disque may have chosen them to serve as an example to radical groups.

For the second strategy to solve the labor problem, Disque needed to change the conditions in the camps. Although Disque may well have "believed that all labor unions were infected with the radical virus," his behavior and the perceptions he recorded in his notebooks suggest a more complex sense of the situation.⁸⁷ Visits to logging camps and mills convinced the Colonel that the IWW propaganda had not exaggerated the miserable living and working conditions that the loggers had to endure. Loggers lived in crowded camps without bathing facilities and with no provision for bedding or laundry. The food in some camps was inedible. "Disque was filled with sick dismay that American workers in the twentieth century had to live as the loggers did."⁸⁸

After establishing his Portland headquarters in November of 1917, Disque set about the task of cleaning up the camps. The negotiations between the industry, labor groups, and Washington were complex. The lumbermen were anxious to get soldiers into their mills and camps, but they were suspicious of Disque and wary of anything that could be seen as compromising their authority. The unions were naturally opposed to any government intervention in the industry. Disque had, in his exasperation, adopted what Professor Hyman calls a "plague on both your houses" attitude towards the lumbermen and the labor leaders. Nevertheless, he continued to meet with both sides during the winter and gradually won a certain amount of respect. Disque's day-books reveal frequent meetings with IWW leaders during December of 1917 and January of 1918. Among the IWW contacts that he names were Pat Rooney, Joe Willis, and a third man named Ellis. His appointment books suggest that he met with these men in secrecy. They may have had outstanding warrants from previous radical labor activities.⁸⁹

The compromise policy that Disque worked out is detailed in the SPD "Employment of Soldiers in Private Camps and Mills." Most historians of the SPD agree that this policy was Disque's first real success in solving the labor problem. The employment policy made soldiers available to the lumbermen on the basis that "for every

⁸⁷Hyman, p. 35.

⁸⁸Hyman, p. 110.

⁸⁹Disque Papers, Daybooks for December, 1917 and January 1918.

soldier furnished, 100 [board] feet of aircraft stock will be turned out each working day."⁹⁰ This meant that any logger or mill owner could get soldiers into his operations to fill in labor shortages, break strikes, prevent sabotage, or impede the IWW tactic of "striking on the job."

The trade-off was that the lumbermen had to provide accommodations for the troops, and these needed to meet the "sanitary regulations of the War Department." "It is the present plan that troops should board with the logging company ... if this cannot be done without crowding, a separate mess hall should be built for the troops." All troops were to receive "the same pay, as civilian labor," but that pay was to be \$3.50 per 8-hour day for loggers and less for common laborers. Pay was to be drawn every two weeks, and no charges were to be deducted for medical service. The document goes on to list specifications for "recreation rooms," "bathing facilities," "latrines," "sleeping facilities," and "dry rooms." These very issues--especially the 8-hour day, showers, and bedding--had been the crux of the IWW's campaign for the last 10 years.

These concessions were a bitter pill for the lumbermen, but the prospect of a second summer like the summer of 1917 was too depressing to contemplate. The SPD divided the coast into six divisions--Puget Sound, Grays Harbor and Willapa Bay, Vancouver, Clatsop, Coos Bay, and Yaquina Bay--extending its influence into virtually all of the northwest coast logging area. The strength of the Division grew to 27,685 men and 1,142 officers by May of 1918.⁹¹ By the end of the war 6 months later, it would surpass 30,000.

Disque's final strategy for solving the labor problem was to provide a government-sponsored organization that would compete with the radical unions. This was the Loyal Legion of Loggers and Lumbermen (LLLL or 4L), an industry-wide patriotic organization headed by Col. Disque. Attributed to Disque and Carleton Parker, the concept of the Loyal Legion was a daring one which met with some success during the war. As early as December of 1917, *The Timberman* reported that "the red, white, and blue button of the Legion is being proudly worn in every [lumber producing] district." By the end of the war, 4L membership had reportedly grown to 130,000.⁹²

Like the SPD soldier-logger concept, the Loyal Legion promised industrial peace if both workers and lumbermen would make concessions. An early version of the 4L code asked employers and employees to endorse the following goals:

⁹⁰(Disque Papers, Employment Policy, n.d., p. 68.

⁹¹Evans and Williams, p. 9.

⁹²*The Timberman*, Dec. 1918, p. 29.

- To maintain the 8-hour day
- To ensure a "just and equitable wage"
- To standardize conditions in camps and mills
- To create a community spirit
- To encourage cooperative hospitals
- To provide health and accident insurance and pensions
- To institute employment service
- To further recreation and education
- To establish a common ground among labor and owners
- To promote better relationship within the industry
- To provide the means for amicable adjustment of issues
- To provide information within the industry
- To promote settlement of logged-over land
- To develop loyalty to the United States⁹³

The Loyal Legion had the most impact in the coastal mills and in the Inland Empire. This second region was the great pine-producing area of Washington, Oregon, and Idaho that had been associated with radicalism since the days of the Western Federation of Miners. The combined efforts of the SPD soldiers and the Loyal Legion members had a stabilizing effect on the lumber industry throughout the region. As Disque anticipated, establishing the 8 hour day deprived the radical groups of their most popular issue. Although legislating the 8-hour day had been tried before--most notably by Washington's Governor Lister in August of 1917--Disque made it stick, at least until the end of the war.

Solving the Production Problem

As we have seen, Disque proposed to augment the lumber industry's production of spruce by bringing the SPD soldiers directly into the business of cutting timber and making lumber. This proposal--like his proposal on the labor issue--was bold and decisive. It also met with success in that it did increase spruce production to an acceptable level. On

⁹³Loyal Legion of Loggers and Lumbermen Papers, University of Oregon Special Collections.

the negative side, however, Disque's industrial schemes were criticized after the war for their excesses. Disque's mentors in the industry included some knowledgeable lumbermen and loggers, particularly from the spruce producing areas of western Washington. Disque appointed such industry notables as Mark Reed of the Simpson Logging Company, J.J. Donovan of Bloedel Donovan, Timothy Jerome of Merrill and Ring, and G.S. Long of Weyerhaeuser to an informal council of advisors for the SPD.⁹⁴ Whatever advice he received from these men, Disque went about making lumber in his own rather idiosyncratic way.

The Spruce Production Division's manufacturing plans concentrated on two unconventional techniques. The first of these was riving or splitting the spruce logs in the forest rather than trying to take them out of the woods on one piece. This split the large mature logs into small pieces that were easier to handle, but riving was not easy, and it wasted potentially valuable timber. The second innovative manufacturing technique was operating the huge milling-in-transit system that had the private mills cutting cants that were shipped by rail to the cut-up mill at Vancouver for re-manufacture into airplane lumber. Before the end of the war in November 1918, Disque was to reconsider both these strategies.

The practice of riving or splitting the logs into several pieces before removing them from the forest came in response to the size of the spruce trees and the rugged terrain of the coast country. While a full-sized spruce log would strain the largest winch (or "donkey engine") and require a railroad to move it to the mill, the riven pieces of logs could be transported by motor truck over plank roads.⁹⁵ Since the SPD proposed to open up new timber stands that did not have railroad spurs, the riving strategy had a great appeal. Waiting for railroad construction and the delivery of large donkey engines would have delayed production for months.

Although riving was an important part of Disque's initial policy for the SPD, the practice antedated the Division. The idea of riving logs too big to transport had been common in the redwood forests of California during the 19th century. In August of 1917, Nels Est of Aberdeen, Washington, proposed that riving spruce cants would produce superior material because splitting--unlike sawing--did not cross the grain.⁹⁶ By September, there was a Rived Airplane Spruce Stock Association in

⁹⁴R.E. Ficken, *Lumber and Politics: the Career of Mark E. Reed* (Seattle: University of Washington Press, 1979) p. 36-38.

⁹⁵Evans and Williams, p. 12.

⁹⁶*The Timberman*, August 1917, p.42.

Aberdeen, Washington. The rived cants produced in Aberdeen were pictured in the September issue of *The Timberman* showing large cants of perhaps 18" on each side, hewn square, and cut to lengths of about 20 feet.

The methods of riving varied, but the most spectacular method and perhaps the most effective was to split the 6' diameter logs with charges of blasting powder. This did split the logs, but it also damaged many logs beyond use. When the SPD began issuing logging contracts, it issued them on a "cost plus" basis for rived spruce. The loggers complained that they were not getting a fair scale by this method since the rived logs scaled far fewer board feet than the whole logs⁹⁷

In addition, the practice was wasteful since much of the tree was left in the woods. Loggers continued to object to riving until Disque abandoned the practice in April, 1918. In addition to the loggers' objections to riving, the mill men convinced Disque that the rived cants were subject to drying and checking and that they often contained a twist that made them difficult to cut. As more powerful donkey engines became available, dragging a huge spruce log through the woods by overhead cable was easier than trying to split it into smaller pieces.

Abandoning the riving policy, however, effectively committed Disque and the SPD to conventional logging technology. This included large donkey engines, and railroad construction. Both of these technologies were considerably more expensive than the riving and trucking strategy.

The SPD approach to milling aircraft lumber was a centralized system which had private mills supplying large pieces of spruce lumber to the re-manufacturing or "cut-up" mill in Vancouver. The Vancouver plant was part of the SPD's original plan and was built by soldiers in 45 working days during the winter of 1917-18. When it opened in February, the plant had a daily capacity of 600,000 board feet, on a 24-hour operating basis. Housed in a new building 348' x 300', the plant included six sets of circular saws mounted in tandem, with edgers, resaws, and trim saws supporting them. Associated with the plant was a battery of kilns capable of drying half the plant's projected output with each charge.⁹⁸

The advantage of the centralized re-manufacturing plant was that the spruce could be sawn to the exacting tolerances that the aircraft manufacturers demanded without training hundreds of sawyers in private-sector mills. The disadvantage was the milling-in-transit plan. The spruce logs had to be cut into cants or flitches at small

⁹⁷Disque Papers, General Orders, April 20-27, 1918

⁹⁸*The Timberman*, January 1019, p. 45.

mills, loaded into boxcars, shipped to Vancouver, unloaded, re-sawn into finished dimensions, loaded again, and shipped to the end user. This required extra handling and excess capacity on the railroad system. At the beginning of the war the railroads had that capacity available and they appreciated the extra business.

By 1918, however, there was a nationwide shortage of boxcars. Although the SPD had priority rights, the division felt the car shortage as early as February of 1918. By the spring of 1918, the car shortage was general throughout the Northwest and was a frequent subject in Disque's day-book. The SPD maintained its productions quota of 11 million board feet each month, but the Vancouver re-manufacturing plant made it more vulnerable to the availability of rail cars than a decentralized system would have been.

The SPD and the West Barracks

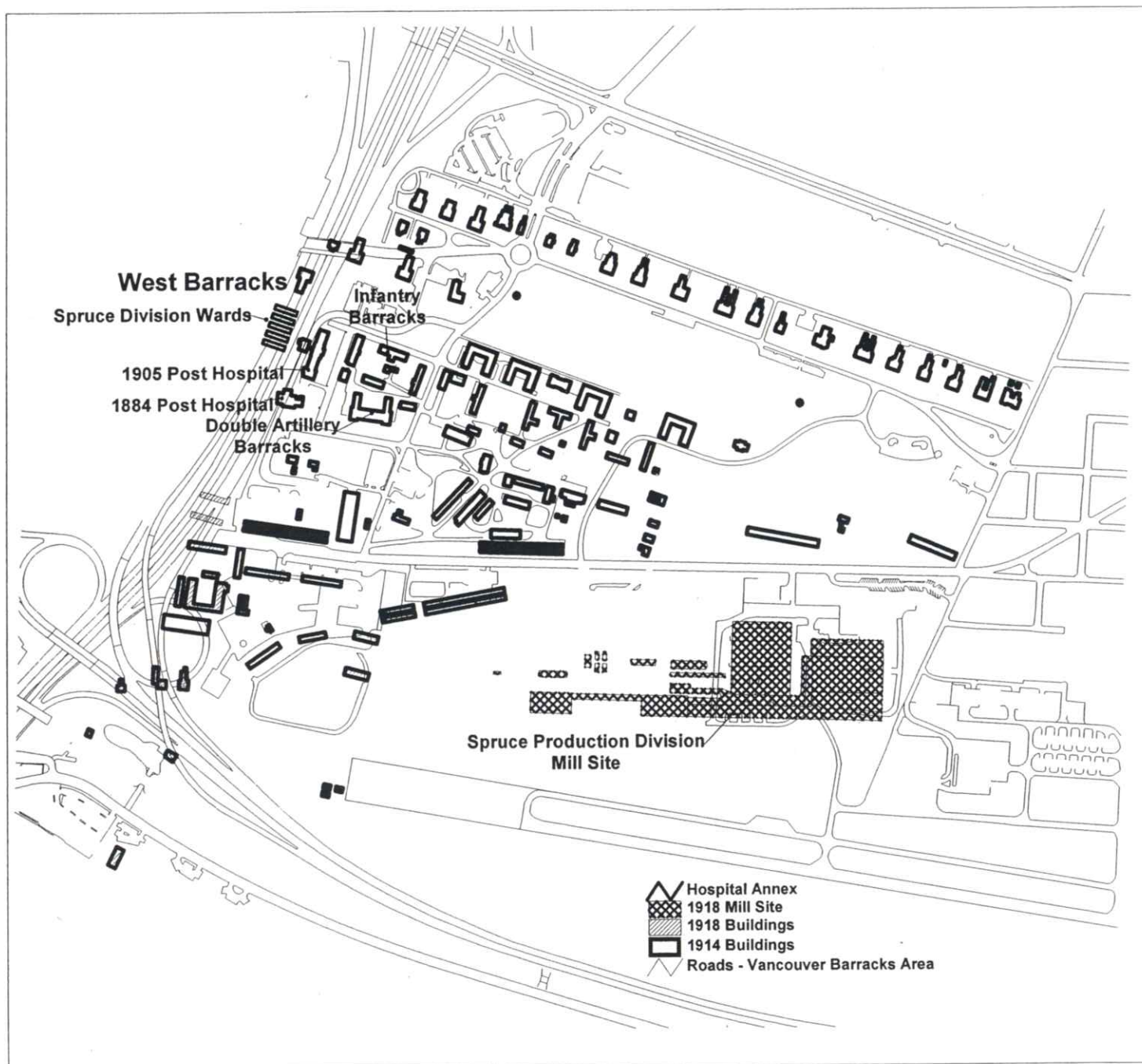
The SPD "took over" Vancouver Barracks, building the huge mill, railroad sidings, and dozens of buildings throughout the post. For the West Barracks, the largest impact of the SPD period was the pressure that this organization put on the medical complex. Some of the Spruce soldiers were stationed at Vancouver Barracks where they did administrative tasks or worked in the mill. Others were with their Squadrons in the mill towns and logging camps in western Oregon and Washington. Sick or injured men who required hospitalization went to the Post Hospital, which was expanded from its designed capacity of 48 beds to a capacity variously reported at 350-500 beds. Weed's analysis of World War I Army hospitals shows the Vancouver Barracks Post Hospital with a bed capacity of 356 in a total of eight new buildings plus the Post Hospital itself.⁹⁹ Maps of the SPD construction (see figure 13) show five separate buildings constructed on the west side of the hospital, to the rear of the Annex.

Sick or injured SPD soldiers stationed with the squadrons in the logging camps of mills received medical services in a two-tier system. Injured or "sick call" men got service at the camp infirmary. Those with serious or lingering problems went to the Vancouver Post Hospital for extended care. Men with serious incapacitating problems were "invalided out" of the Army.

⁹⁹ Weed, p. 40.

Vancouver Barracks

World War I Development



Data Source:
 Fort Vancouver Archaeology Office
 Layout:
 Created by Ralph Delamarter (6/2002) in
 consultation with Ward Tonsfeldt

Created by Ralph Delamarter from copies of
 blueprints located in the National Archives.
 Dimensions and locations are approximate.

Figure 18 Summary map of World War I
 building programs

For the week of August 27, 1918, Major Sanford B. Whiting, who was Medical Officer for the Yaquina Bay District of the SPD, sent 43 men to the Post Hospital for care. These men came from 15 different SPD Squadrons in the Yaquina District. Their health problems are listed in Table 7. These are typical of other weeks:

Table 7: Health Problems, Week of August 27, 1918¹⁰⁰

Health Problem	Number of Men Afflicted
Hernia	8
Heart problems	6
Varicose veins	5
Rheumatism	4
Mental deficiency	2
Flat feet	2
Leg injuries	2
Tuberculosis	2
Old injuries	2
Arm and elbow injuries	2
Appendicitis	1
Bullet wound	1
Asthma	1
Lead poisoning	1
Indigestion	1
Bright's Disease	1

¹⁰⁰Yaquina District Weekly Reports, August 27, 1918; in SPD Medical Files, NARA Seattle Branch.

The Yaquina Bay District was one of eight SPD districts, but it was one of the largest. Winter weather brought on additional health problems, especially with respiratory infections. Later, the influenza pandemic would strain health care resources throughout the system.

In addition to primary health care, the SPD medical staff was charged with health maintenance work. This included the inspection of camps and saw-mill "hotels" throughout the Northwest. The SPD medical staff also administered an aggressive anti-venereal disease program. The SPD policy for camp conditions was set out in Bulletin Five, dated December 3, 1917. This governed the level of sleeping quarters, latrines, bathing facilities, messing facilities, and recreation rooms that the lumber companies must provide if they were to have soldiers working in their camps. Virtually all of these concerns were potential sticking points in the negotiations between Disque and the lumber companies.

Those lumber companies that complied were required to have one barracks for each 25 or 50 men, with 500 cubic feet of space per man, four square feet of window space per man, good heating, good ventilation, and "new, clean, well-made" bedding equipment. Latrines needed to be inspected for location and design, and to have one seat for every eight men. Bathing facilities needed to have three shower heads for each 25 men. Mess facilities were to be inspected periodically. Recreation rooms were to be clean and dry, well-heated, and equipped with reading and writing spaces.¹⁰¹

These requirements were not established with any respect for logging bosses' blood pressure. It is probably safe to assume that a few incidents of managerial apoplexy greeted the regulations. They provided a much better level of comfort and cleanliness than most loggers were accustomed to, but they did not exceed Army requirements for soldiers' care and feeding. With the hard work of logging and the inclement weather in the Coast Range, extra care was called for. Disque's basic agreement with the lumber companies was that he would not assign his soldiers to camps that did not meet Army requirements for detached personnel.¹⁰²

¹⁰¹SPD Files, NARA Seattle Branch.

¹⁰²The conditions of logging camps varied a great deal in different kinds of logging and with different companies. See, for example, Richard Rajala, "Bill and the Boss: Labor Protest, Technological Change, and the Transformation of the West Coast Logging Camp, 1890-1930" *Journal of Forest History* (vol.33, 1989) p. 168-179.

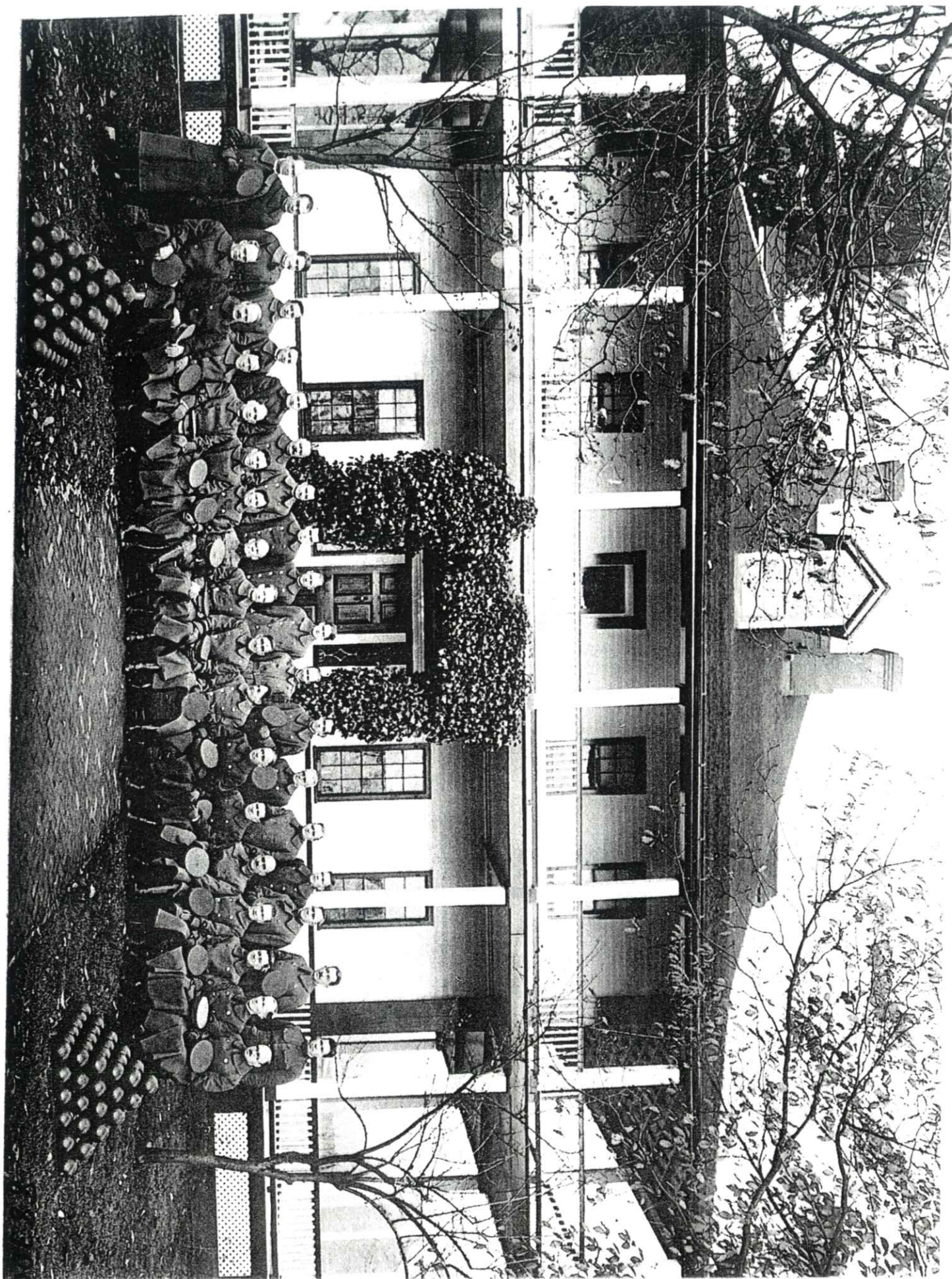


Figure 19 SPD staff at the Grant House, Col.
Disque in center National Archives

Historic Personages Associated with the Spruce Production Division

Colonel and later General Brice P. Disque is the most significant person associated with the Spruce Production Division. General Disque left the service soon after War I and did not earn a national reputation for his military career. His achievements as the leader of this remarkable organization merit some recognition, however.

Significance of the Spruce Production Division Theme

The Spruce Production Division was an important element in the military history of World War I and it was an important element in the industrial history of the Pacific Northwest. Prior to the SPD, the Northwest experienced labor unrest that often took the form of sabotage and violence. This was not exclusive to the Northwest, of course, but the Army at Vancouver Barracks had responded to numerous incidents of civil disturbance and sabotage resulting from labor unrest during the three decades previous to World War I. The IWW or "Wobblies" were perhaps the most notorious of the radical groups and they were firmly entrenched in the west coast natural resource industries. The events of the summer of 1917 proved that General Pershing was correct in his concern about producing essential war material in Oregon and Washington.

The SPD's policies of 8-hour days and better living conditions for soldier/workers went a long way toward changing that picture. Labor resentment did not change overnight, but camp conditions did literally change overnight as lumber companies met SPD camp standards so that they could get soldiers and cash in on the war-time demand for spruce. *The History of the Spruce Production Division* noted in 1919 that the change in camp conditions might be a permanent legacy of the SPD:

The percentage of improvement in living conditions would be hard to estimate. But it has been great and it has proven its own economic worth. It is to be hoped that this improvement is to be permanent and that it will augment from year to year by the force of its own momentum.¹⁰³

¹⁰³[McCollister and Gill] p. 76.

On the other hand, the need for spruce in aircraft construction declined after the war and Sitka spruce returned to relative obscurity. Disque's innovations in logging technology, especially the idea of riving large logs, sank without a trace in the industry.

There are two Spruce Production Division structures on Vancouver Barracks that have survived. Both of these are at Pearson Field, and both have been moved and rehabilitated in ways that have changed their character. One is the field headquarters, and the other is the aircraft construction shop. None of the temporary SPD buildings in the West Barracks area survives. The Quartermaster Storehouse (Building 630) was used to store Spruce Production Corporation files, but this was after the War and the period of SPD significance. The best connection between the SPD and the West Barracks is the Post Hospital and other buildings in the Medical Services group.

THEME IV: THE CIVILIAN CONSERVATION CORPS AT VANCOUVER BARRACKS 1933-1942

During the Great Depression, the Pacific Northwest was especially hard pressed by a combination of economic and social ills. As early as 1928, the lumber industry was feeling the pressure of declining sales and excess production capacity. Mills closed down and workers in the woods and the mills were laid off. For much of the Northwest, lumber mills were a feature of small-town economic life. Some mills were located in the large cities like Portland, Tacoma, or Everett, Washington. Most were located in small communities near the timber, however. When the mill closed, there was no other work available, since there was no other industry to absorb the workers. Few residents of small towns had the resources for self-sufficiency. Livestock, gardening, hunting, and fishing provided subsistence to a few, but most people were desperate when their savings were gone.

A synchronous, but unrelated phenomenon was the Dust Bowl, or drought in the Midwest. As conditions worsened during the 1920s in Kansas, New Mexico, Oklahoma, Colorado, and the Dakotas, farmers were unable to survive. Most of them simply left their farms. California, Oregon, and Washington were attractive to them. Many of these people arrived in rural areas of the Northwest but were ill-adapted to industrial work in the forests or mills. They generally did not have the means to begin farming on their own.¹⁰⁴ These immigrants increased the labor pool of many rural communities beyond the number of available jobs. When the economy collapsed after 1929, their positions became even more precarious.

¹⁰⁴Dorothy O. Johansen and Paul Gates, *Empire of the Columbia* (New York: Harper, 1957) p.555 ff.

In the 1932 election, Franklin D. Roosevelt ran on a platform of social stabilization and economic relief. This was the genesis of the New Deal.

The Civilian Conservation Corps

The Civilian Conservation Corps or CCC as it was widely known was one of the most successful social programs of the New Deal. Most accounts agree that the CCC was an idea that President Roosevelt had developed himself. It was also an idea that he had used in his campaign.¹⁰⁵ In Roosevelt's original conception and in the legislation that he brought to Congress in March of 1933, the CCC was to have dual purposes of financial relief for unemployed workers and conservation measures for public lands.

The idea has been traced to a 1912 essay by American philosopher William James entitled "The Moral Equivalent of War." James called for young men to be conscripted into a "great army" to be "enlisted against nature."¹⁰⁶ Like most philosophers, James was a bit vague about the details of this grand plan. When the Depression arrived 18 years later, James' basic concept seemed more practical. The Forest Service, for example, began operating conservation work camps for unemployed men in California and Washington. In Oregon, Cascade National Forest Rangers C.B. McFarland and Axel Lindh prepared a very innovative plan for unemployed workers in the mill community of Oakridge. This community, like dozens of others, had been devastated by the mill closures and a collapse of the local economy. McFarland and Lindh submitted their plan to National Forest administrators in Washington DC in March of 1933, one month before the CCC came into existence.¹⁰⁷ In Europe, conservation works for the unemployed were available in many countries, and especially in Germany under the Weimar and National Socialist governments.

¹⁰⁵John A. Salmond *The Civilian Conservation Corps, 1933-1942, a New Deal Case Study* (Durham: Duke University Press, 1967) p.4ff.

¹⁰⁶Salmond, p. 4.

¹⁰⁷See Lawrence and Mary Rakestraw, *History of the Willamette National Forest* (Eugene: Willamette National Forest, 1991) p. 74.

If Roosevelt's plan was not exactly unique, it was well-conceived and widely successful. As CCC publicists were fond of pointing out, it was also the first of the "national recovery organizations" established by the New Deal administration.¹⁰⁸

The CCC was successful on two fronts: The conservation work that the program undertook helped repair the damages to forests, range, and farms that had accumulated during the first decades of the 20th century. Urbanization had pulled thousands of Americans off family farms and the mechanization of agriculture with internal-combustion technology had increased the size of farms. As a result, the level of care and good husbandry diminished. High prices for timber had encouraged aggressive logging. Much of the Midwest was subject to a prolonged drought during the late 1920s and early 1930s, and the dry years had led to erosion by wind and water. The CCC was dedicated to erasing these depredations to America's public lands. Beyond the actual conservation work that the CCC men performed, they received a thorough indoctrination in good management practices. They were shown the results of poor management and the benefits of conservation and good resource management. For the CCC enrollees who returned to their own farms, this lesson would be important for the future of American rural life.

The second purpose of the CCC was social stabilization. This idea was important at the beginning of the CCC but was relegated to a very minor place by the end of the period. An internal publication of the CCC in 1934 emphasized the organization's social goals over its environmental goals:

- | | |
|--------|--|
| Goal 1 | Relief of unemployment, especially among young men |
| Goal 2 | Health and attitude of enrollees |
| Goal 3 | Relief of destitute families |
| Goal 4 | Work totals (Conservation Projects) ¹⁰⁹ |

In the 1944 final report on the CCC prepared by Conrad Wirth and submitted to Harold Ickes, Secretary of the Interior, however, Wirth listed conservation work and conservation training as the first 8 of 10 accomplishments that the program achieved. He listed relief and social stabilization as a very minor point in the CCC program:

¹⁰⁸Guy D. McKinney "What the CCC Is and Does" in *My CCC History*, a *Scrapbook/Souvenir for Enlistees*, Company 5463, Camp S-139, Greentown, PA.

¹⁰⁹McKinney, p.2-3.

The CCC program was looked on by many as a relief program rather than a conservation program. A good conservation program can do much toward the relief of the unemployed, but its main objective should never be thought of as relief.¹¹⁰

This shift in emphasis between 1934 and 1944 interpretations of the CCC is very interesting. We might speculate that the liberalism and social planning that were popular in the early 1930s had paled considerably by 1944. Conservation was a much less controversial idea.

The CCC was created by Executive Order #6101 and was organized as an amalgam of four departments of the Federal government. These were the Department of War (Army), the Department of Agriculture (Forest Service), the Department of Labor, and the Department of the Interior (Bureau of Reclamation, Fish and Wildlife, National Park Service, Office of Indian Affairs).¹¹¹ When the operation began, only the Department of War was prepared for a large influx of men. Early estimates suggested that as many as 250,000 young men would enroll. The Forest Service, under Chief Forester Stuart, prepared plans for conservation work, but the agency was not prepared to operate the camps. As a consequence, the Army became the most important element in the mix of agencies and the CCC developed with a profoundly military flavor.

As policies were developed, the following pattern emerged:

- A: The CCC would enroll only young single unemployed men whose families were on public relief;
- B: The enrollees would be paid \$30/month, but must agree to remit \$25 to their families; This amount was deducted from their pay;
- C: Enrollees would live in barracks, wear uniforms, and maintain military discipline;
- D: Over 70% of the enrollees would come from east of the Mississippi, but 90% of the projects would be conducted on public lands west of the Mississippi. Consequently most enrollees would be sent far from their homes.

¹¹⁰Conrad L. Wirth, "Final Report to the Secretary," Jan. 1944, p.2.

¹¹¹Wirth, p.2.

E: The Federal agencies managing the lands where the camps were located would choose and design the projects.

It is probably safe to say that one social effect that the CCC had was to break up regionalism and to promote homogeneity among young Americans. Many CCC men left their rural homes--especially in the South or in Appalachia--and traveled to the West or to other regions with extensive public lands. They often went from CCC camp into the military for service in World War II. Many returned to the areas where they had served in the CCC rather than to their original homes.

The Civilian Conservation Corps at Vancouver Barracks

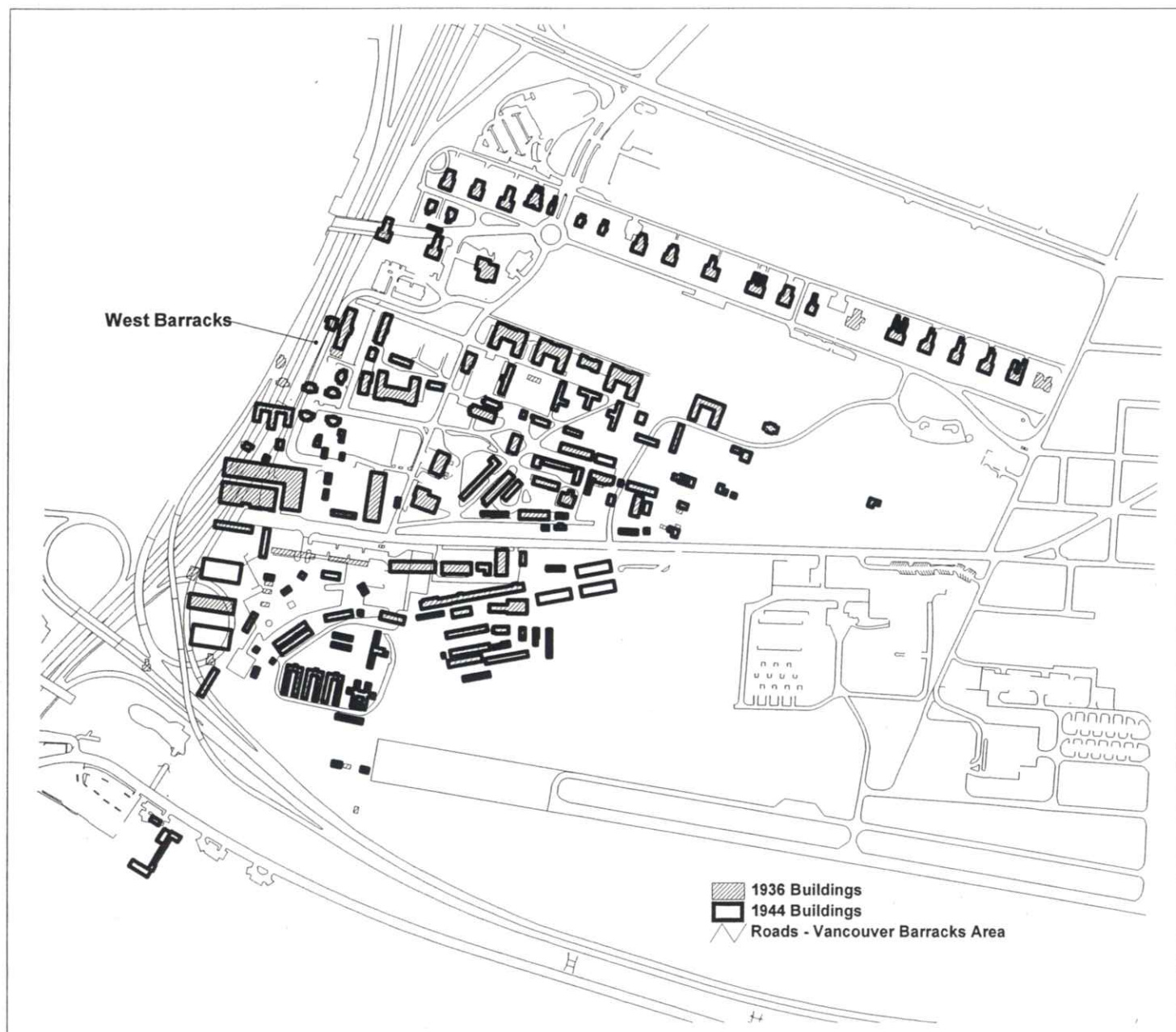
In April of 1933, soon after the CCC was formed, the War Department selected Vancouver Barracks as a regional center for CCC administration, training, and supply. The nationwide CCC organizational structure included nine units or "corps areas" across the U.S. Vancouver Barracks became one of the Districts of the Ninth CCC Corps. In November of 1933, the CCC organizational structure was formally separated from the Vancouver Barracks organizational structure although there was continuity at the highest level of command. The Quartermasters were separate, as were the motor pool and other service organizations. On November 18, General James K. Parsons took command of the Vancouver CCC District. On October 29, 1936, General George C. Marshall succeeded General Parsons. The first group of enrollees to arrive in 1933 numbered 800. The Barracks Quartermaster, Col. T.M. Knox, was initially charged with the task of supplying the new recruits and the 26 CCC camps to be built in the area. Later in 1933, the CCC established its own supply organization at the Barracks.¹¹²

With the CCC District Command in place at Vancouver Barracks, the CCC was a separate organization at the Barracks much as the Spruce Production Division had been, or the Department of the Columbia before that. By the end of the CCC in 1942, the Vancouver District had received 40,000 men, housed them temporarily, outfitted them, and screened them for diseases. They were then transported to their camps in Oregon and Washington, and fed, supplied, and paid their meager monthly emolument. All of these activities and the endless paperwork that they generated, were the responsibility of the Vancouver District staff.

¹¹²*Official Annual, 1939, Ninth Corps Area, Civilian Conservation Corps*, p.38.

Vancouver Barracks

World War II Development



Data Source:
Fort Vancouver Archaeology Office
Layout:
Created by Ralph Delamarter (6/2002) in
consultation with Ward Tonsfeldt

Figure 20 Summary map of World War II
building programs

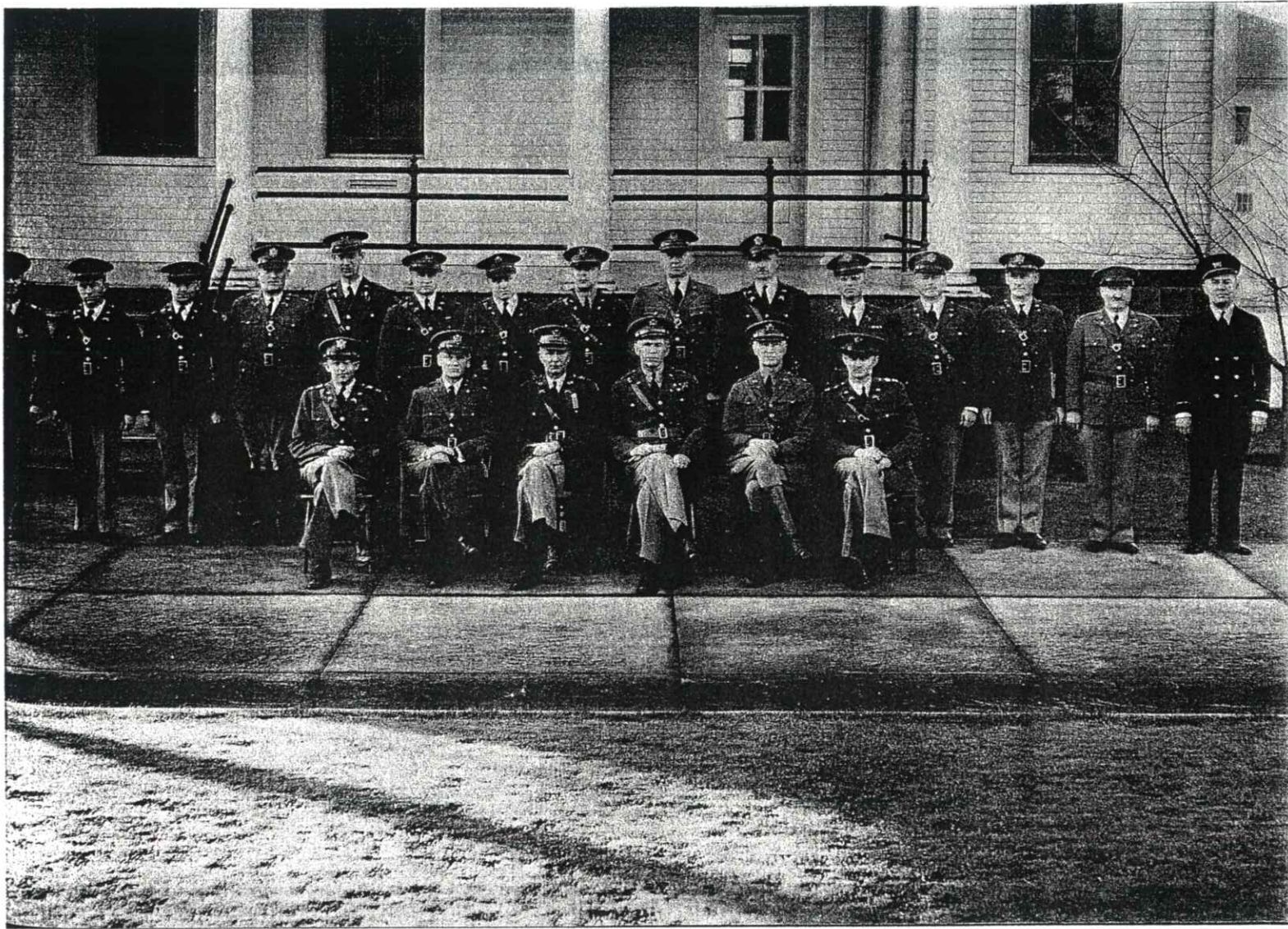


Figure 21 CCC officers with General Marshall in center. Photo from CCC annual

Once the enrolled men had left Vancouver Barracks and reported to their camps, they were under the administrative aegis of the Forest Service, or one of the other branches of the Department of the Interior. These included the National Parks Service, the Oregon and California Railroad Lands administration, and the Grazing Service. The Indian Service—soon to become the Bureau of Indian Affairs—had its own separate Civilian Conservation Corps that was administered from the tribal governments rather than the Army. The Vancouver District served part of the USDA Forest Service Region 6, which included Oregon, Washington, and northwestern Idaho. Civilian Conservation Corps activities in Region 6 were especially intense because of the extensive acreage of the 26 National Forests in the Region.

In the nine years of its operation, the Vancouver District built and staffed 67 camps. These did not operate simultaneously. Camps lasted two to three years until all the conservation work projects adjacent to the camp were finished, then a new camp was built. Table 9 shows that in 1939, the Vancouver Division operated thirty camps in Oregon and Washington.¹¹³ Each of these camps undertook conservation projects in the surrounding area. When the camps were re-located, they retained their unit number and staff, but they were constantly receiving new enrollees and “graduating” ones that had served for their enlistment period.

In addition to the ongoing conservation work projects, CCC crews also fought forest fires, much as regular Army troops had done on occasions in the past. Fire fighting was especially important in the Northwest, and was well-regarded by members of communities whose livelihood depended on the forest resources. Another activity of the CCC during the 1939-1941 period was military support work on military bases. The second World War was beginning in Europe and the United States was divided about American participation. Using the CCC for enhancing military preparedness was a controversial area that was criticized by opponents of the CCC and by pacifists.¹¹⁴ Erigero (1992) notes that six camps of the Vancouver District were “directly engaged in war-related work” in 1942 after Pearl Harbor.¹¹⁵

The CCC also operated education programs for basic literacy and for some specialized training. Most enrollees learned building or mechanical trades under the tutelage of the local experienced men (LEMs) who supervised their crews.

¹¹³*Official Annual, 1939.*

¹¹⁴Ed Cray, *General of the Army: George C. Marshall, Soldier and Statesman* (New York: Norton, 1990) p. 134ff.

¹¹⁵Erigero, 1992 p.322.

Table 9: CCC Camps in the Vancouver District, 1939

Unit Number	Place	State
2946 th Company	Vancouver Barracks	Washington
1922 nd Company	Camp Bonneville	Washington
491 st Company	Warrenton	Oregon
1258 th Company	Seaside	Oregon
1456 th Company	Cathlamet	Washington
2908 th Company	Foss	Oregon
3225 th Company	Ilwaco	Oregon
5461 st Company	Timber	Oregon
5477 th Company	Tillamook	Oregon
5481 st Company	Yacolt	Oregon
263 rd Company	Prineville	Oregon
928 th Company	Zig Zag	Oregon
944 th Company	Carson	Washington
945 th Company	Goldendale	Washington
1294 th Company	Brothers	Oregon
1452 Company	Cascade Locks	Oregon
1454 th Company	Camp Sheridan	Oregon
1469 th Company	Simnasho	Oregon
5428 th Company	Moro	Oregon
5480 th Company	Skamania	Washington
927 th Company	McKenzie Bridge	Oregon
981 st Company	Reedsport	Oregon
1213 th Company	Camp Woahink Like	Oregon
1443 rd Company	Sublimity	Oregon
907 th Company	Cascadia	Oregon
3402 nd Company	Blachly	Oregon
426 th Company	Silverton	Oregon
3503 rd Company	Corvallis	Oregon
2908 th Company	Side Camps, Foss and Jewell	Oregon

The Civilian Conservation Corps Building Program at Vancouver Barracks

The CCC began building on the Vancouver post in 1935. The CCC had a very strong commitment to building as a part of their conservation work. They built administrative and recreational structures for National Forests, National Parks, state parks, and other public agencies throughout the west. They employed thousands of “local experienced men” who were masters of the building trades, including carpentry, masonry, heavy equipment operation, wiring, and plumbing. These buildings were not for use by the CCC, but were intended for the agencies with the CCC serving as contractors.¹¹⁶ Many of these CCC-built structures had sensitive design and used materials including timber and native stone in innovative ways. For their own use, the CCC built modest frame structures that were often “portable” so that they could be dis-assembled and re-assembled as the camps moved.

The CCC buildings on Vancouver Barracks were modest structures built under the supervision of the District Quartermaster. The few photos we have show buildings that appear to have been built to standard Quartermaster designs, although the building record forms (QMC form 117) do not list the plan number in the appropriate blank. None of these buildings is extant in the West Barracks. Most of them were built in the South Barracks area. The first CCC building was apparently built in the area of the Hudson’s Bay Fort Vancouver orchard and the Kanaka Village. Patricia Erigero describes the local of the CCC construction on the post as “east of McLoughlin Road, at the west end of the old Spruce Mill site.”¹¹⁷ This seems reasonable from foundation remains and archaeological work done in conjunction with the interchange between the I5 freeway and the State Route 14 freeway. Most of the remaining CCC buildings were demolished in 1963.

The following CCC buildings are listed (but not recorded) in the post Engineering Office files:

¹¹⁶For an excellent overview of the CCC building program, see E. Gail Throop, “Utterly Visionary and Chimeric: the CCC Building Program on Forest Service Region 6” unpub, MA Thesis, Portland State University, 1976.

¹¹⁷Erigero, p. 328.

Table 10: Civilian Conservation Corps Buildings

At Vancouver Barracks	
Garage Storage	Building number 301
Paint Shop	Building number 302
Automotive Repair Shop	Building number 303
Garage Storage	Building number 304
Temporary Barrack Unit	Building numbers 310-311-312
Temporary Recreation Hall	Building number 312
Temporary Office and Supply	Building number 314
Temporary Mess Hall and Kitchen	Building number 315
Temporary Warehouse	Building numbers 316-317
Temporary Issue and Receiving Warehouse	Building number 318
Office Building	Building number 319
At Camp Killpack A-6 Bonneville Rifle Range	
Mess Hall and Kitchen	Building number 250
Incinerator	Building number 251
Infirmery	Building number 242
Barracks	Building numbers 253,-5,-6,-7,-8,-9,260,261
Latrine	Building number 254, 262
Recreation	Building number 263
Administration	Building number 264
Library	Building number 265
Officers' Quarters	Building number 266
Officers' Garage	Building number 267
Pump House	Building number 268

Post Plan No.

(Below enter chronologically all modifications, additions, introductions of water, sewer, lights, heating, etc.)

[illegible]

Figure 22 Form 117 building record for CCC building 323

INSTRUCTIONS.—“a” State whether heated from central heating or by individual heating plants, stoves, furnaces, or fireplaces.
“b” State whether steam, vapor, hot water, or hot air.
“c” State whether

Figure 22, on the previous page, shows the record sheet (form QMC 117) for Building 323, which is an example of a CCC warehouse that was built in 1939 at Vancouver Barracks. Number 323 is beyond the numerical series on table 10, which is based on data in the Barracks Engineering Office. The form shows a typical frame warehouse building that meets the general specifications of the standard plan for a Quartermaster Storehouse (or warehouse) in the 100-116 series (see Appendix). The Plan Number has been left blank on the form, however. The notation on the form indicates that the building was demolished some time prior to 1963.

The Civilian Conservation Corps and Medical Service

In May of 1933, the military received authorization to provide CCC staff and enrollees with medical and dental care.¹¹⁸ For the Post Hospital and Dental Surgery, this meant a significant increase in patient load. Prior to the inception of the CCC, the number of men stationed at Vancouver Barracks had dwindled to perhaps 250. Adding staff and dependents, the total health care capitation for the medical services complex was no more than 500. With the CCC in place, there were about 4000 to 6000 people who were potential patients. In addition, the medical staff had to provide induction examinations for CCC enrollees.

The CCC men were assigned to camps, of course, and most of these were located in forests or other public lands miles away from the Post Hospital. Local medical services would have been the first recourse for injuries or minor illnesses. Most camps had an infirmary and a local physician on call.¹¹⁹ The Post Hospital served for cases that required more extensive care than the camps could provide. Figure 23, a photo taken in one of the four ward floors of the Post Hospital, shows several CCC enrollees in traction for broken legs. This level of care would presumably have strained the camp infirmaries.

¹¹⁸National Archives, RG zx AGO files, section 52

¹¹⁹*Official Annual, 1939*, p. 54.

Erigero (1992) notes that in 1935 the CCC built a hospital for CCC workers "south of the 1918 morgue, west of the main hospital."¹²⁰ This does not appear in the 1934 aerial photo of the West Barracks, figure 1. It was probably a ward unit that relied on the Post Hospital for medical services and logistical support. The 1939 photo of hospitalized CCC enrollees is taken in the Post Hospital, and there is no mention of additional hospital facilities reserved for the CCC.

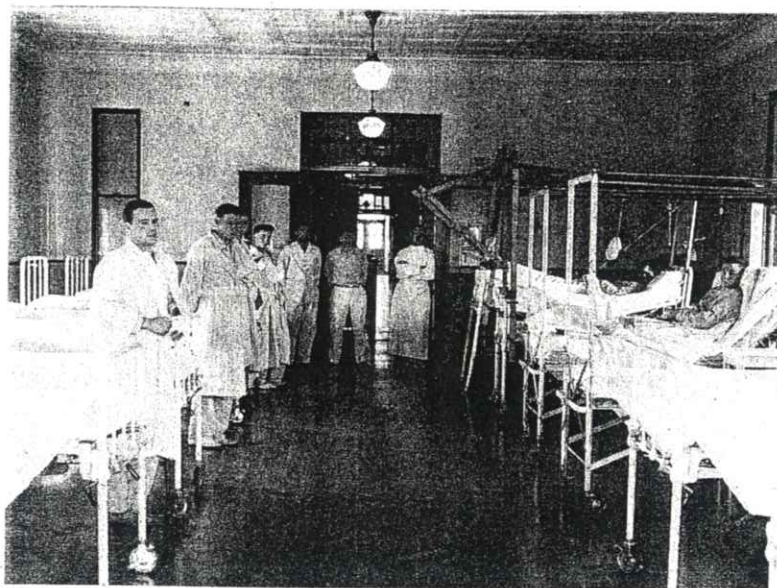


Figure 23 CCC patients at the Post Hospital. Photo from CCC annual

¹²⁰Erigero, 1992, p. 325.

Historic Personages Associated with the Civilian Conservation Corps Theme

By far the most important historic character associated with the Civilian Conservation Corps at Vancouver Barracks was General George C. Marshall.¹²¹ Marshall was, of course, a major military and political force in World War II and in the post-War period. He was also an enthusiastic commander and supporter of the CCC. His first work with the CCC occurred in 1933, when he was an Infantry commander at Fort Moultrie, South Carolina. Here he established 17 CCC camps for over 500 men in Georgia and South Carolina.

He went from South Carolina to Chicago and then in October of 1936 he was assigned to Vancouver Barracks as Commander of the 5th Infantry Brigade. Included in this position was the command of the CCC Vancouver District. Marshall is reported as characterizing the CCC as the "greatest social experiment outside of Russia."¹²² He supported the educational programs in the CCC. He brought outstanding men from the camps to the Portland Chamber of Commerce luncheons, where the young men gave presentations about their backgrounds and their experiences in the CCC.

At Vancouver, Marshall was instrumental in mustering financial support for the Barracks. He worked with local Democratic Committeeman D. Elwood Caples to enlist the support of Washington's House and Senate delegations. They were apparently successful in wringing money out of several agencies of the Roosevelt administration. The result was over \$400,000 in funds from the Works Progress Administration and other agencies by the time Marshall left in 1938.¹²³ Among these WPA projects was the set of seven non-Commissioned Officers' duplexes in the West Barracks.

Marshall was a character who combined energy and effectiveness in his command. He was also comfortable with civilians and especially well-received in Vancouver. One episode that most biographers cite is his personal management of the Soviet Transpolar fliers who landed at Vancouver in June of 1937. Marshall

¹²¹For a general treatment of Marshall's career at Vancouver Barracks, see Keith Petersen "George C. Marshall at Vancouver: Preface to a Heroic Career" *Clark County History* (v. 17, 1976) p. 21-43 and Cray, p. 144ff.

¹²²Cray, p.115.

¹²³Petersen, p.38.

brought the flight crew to his residence, provided them with new civilian clothes, and paraded them through Vancouver and Portland. In short, Marshall was something of a local hero before his later national achievements. He was also enthusiastic about the region, especially the mountains and the recreational opportunities available there. He and his wife Katherine reportedly planned to retire in Vancouver, purchasing property for their retirement home overlooking the city and the Columbia River.

Significance of the Civilian Conservation Corps Theme

The CCC was a national program, but it had special significance for the small timber-dependent communities of the Pacific Northwest. These areas were more battered by the Depression than other areas of the nation. The CCC brought employment to local men through the "local experienced men" program, and brought an influx of new people to patronize local businesses. The CCC also contributed to the infrastructure of these areas by building roads, fences, water projects, and other improvements. Many CCC men married local girls, and others returned to their camp locations to live after World War II. In many small towns of the west, CCC alumni organizations are still active.¹²⁴

The CCC left us no buildings in the West Barracks. The CCC theme rests with medical services that the Post Hospital provided to the 4000-6000 CCC enrollees, and with the character of General George C. Marshall.

¹²⁴See, for example, Edwin G Hill, *In the Shadow of the Mountain: The Spirit of the CCC* (Pullman: Washington State University Press, 1990).

PART 4: DESIGN ELEMENTS AND CHARACTER-DEFINING DETAILS OF THE WEST BARRACKS BUILDINGS

Introduction

This section of the Historic Structures Report briefly traces the evolution of U.S. Army architectural traditions and design elements in respect to four basic building types in the West Barracks complex: Barracks and Administrative buildings, Military Hospitals, the Red Cross Convalescent Centers, and Military Dependent Housing or Family Housing. Following a brief review of Army architectural practice, this section of the report focuses on the design influences affecting these building types during three periods of building in the West Barracks, 1880-1899; 1900-1919; and 1920-1941. Establishing a context for the design elements of the West Barracks buildings allows us to identify the character-defining details that are critical to the architecture of the post.

The buildings at the West Barracks bear tangible physical witness to the historic events and trends that played out nationally and within the post's boundaries. Understanding why Vancouver Barracks buildings look as they do adds dimension to our appreciation of the post's connection to the broader history of the U.S. Army. The gradual evolution of architectural standardization (both of styles and plans) and construction practice coincides with U.S. Army organizational development between 1880 and 1941. During the decades preceding World War I, while various recommended plans were available, the flexibility allowed the individual post commander to make building decisions substantially affected architectural results. After 1900, with extensive Army reorganization, architectural standardization fostered efficiency and economy in the building program. This limited the Construction Quartermasters on posts throughout the

U.S. to Army standard plans (see Appendix).

At Vancouver Barracks, the building types that represent the four major functional categories include the following:

Dependent Housing

Hospital Steward's Residence (1887-1888)
 Hospital Sergeant's Residence (1907)
 Duplexes for Non-Commissioned Officers (1938).

Medical Service

Post Hospital (1904)
 Dental Surgery (an older building put to use for dentistry in 1910).

Convalescent House

American Red Cross Convalescent House (1918-1919).

Garrison and Administration

Infantry Barracks (1887)
 Artillery Double Barracks (1904)
 Mess Hall (1914)
 Quartermaster's Storehouse (1914)

The following discussion reviews design elements of these various U.S. Army building types within the time periods outlined above, with reference to Vancouver Barracks structures when applicable. The years that bracket the three periods are not intended as precise cut-off dates but rather as an approximate indicator of the years when design ideas changed or flourished. The evolution of U.S. Army architectural design is by no means linear-- styles often overlapped in use at military posts. As architectural historian Bethanie Grashof observed:

...The roots of [these design concepts] are obscure, buried deep, primarily in the drawings and papers of the National Archives and within the drawing files at various Army posts throughout the country.¹²⁵

¹²⁵Bethanie Grashof, *A Study of United States Army Family Housing Standardized Plans 1866-1940* Vol. I (Atlanta: georgia Institute of Technology, 1986) p. ii.

U.S. Army Architectural Practice: an Overview

1880-1899

During the last two decades of the 19th century, the architectural design and construction of U.S. Army buildings moved toward standardization, although it was difficult to achieve. In her study of 19th century U.S. Army architectural practice, Alison K. Hoagland notes that most individual post commanders, treasuring their autonomy, refused to follow through on instruction and guidance from Washington DC Hoagland explains:

For decades the willful independence of those closest to the construction process was [partially] responsible. Not until line officers recognized the efficiency of a centralized authority and the expertise of professional designers would they accept standardized designs issued from Washington.¹²⁶

The Army's "line and staff" structure made organization of centralized design extremely difficult because the "line" included officers and troops at distant posts and the "staff" was composed of personnel in Washington or at divisional headquarters. There were no architects to supervise building design in 19th century Army command offices. In addition, the Quartermaster General, who reported to the Secretary of War, carried great responsibilities but had little power, "[He] had the authority to approve all building plans sent to him, and he could suggest certain model plans, but he could not order anyone to build them."¹²⁷

Building designs at individual posts during the 19th century were most often devised by the post Quartermaster or the "construction quartermaster" at larger posts. By making ultimate building design and construction decisions, the quartermaster could circumvent official regulations concerning space and size for facilities; "Line officers were reluctant to turn over their responsibility to staff officers in Washington because they would not concede that the staff designs were any better than their own..."¹²⁸

¹²⁶ Alison K. Hoagland, "The Invariable Model," *Journal of the Society of Architectural Historians* Vol 57:3 (1998) p. 298.

¹²⁷ Hoagland, p. 300-301.

¹²⁸ Hoagland, p. 301.

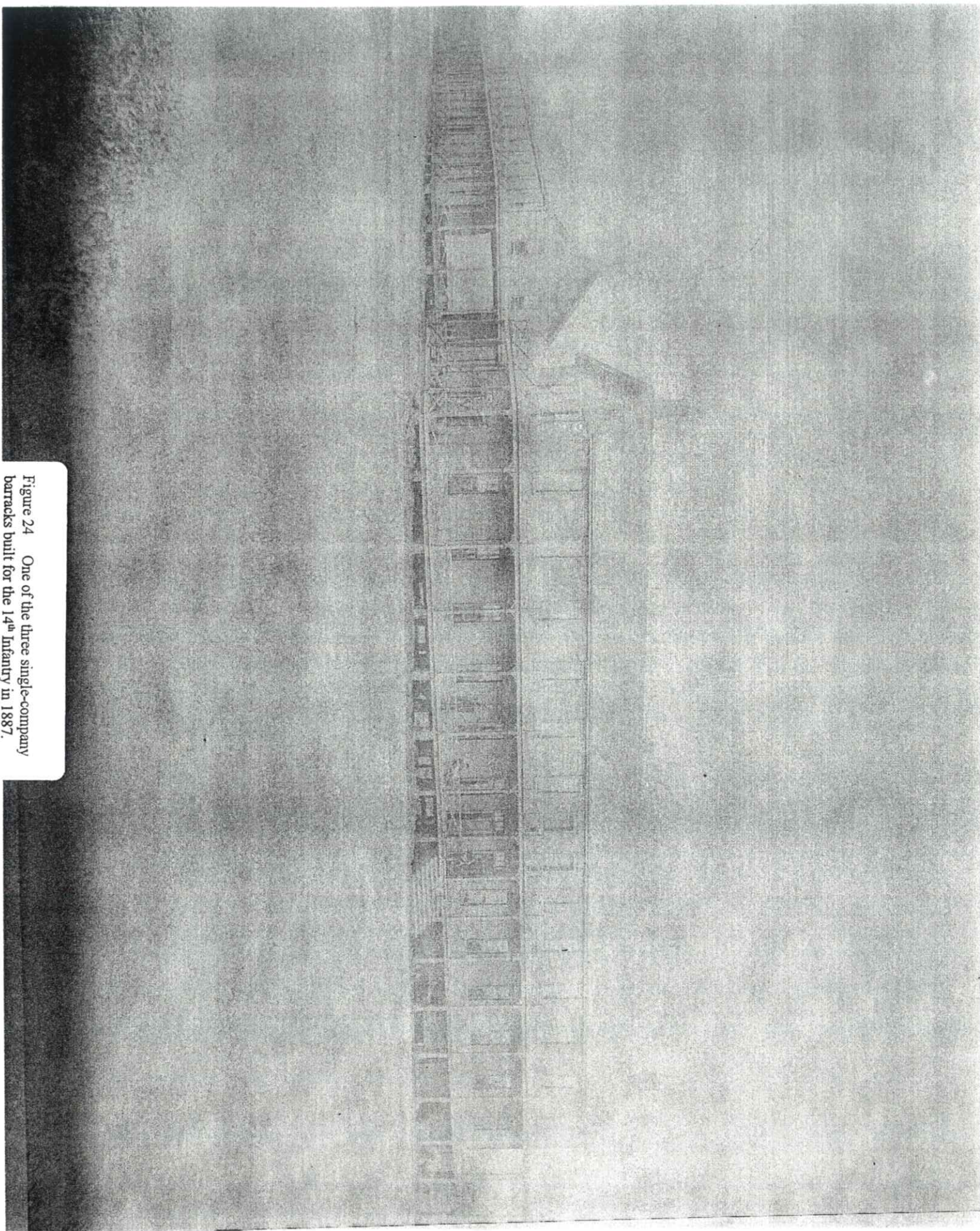


Figure 24 One of the three single-company barracks built for the 14th Infantry in 1887.

This could be Bldg 607

An important step toward standardization of U.S. Army plans came early in the 1880s. In 1882, recognizing the changing role of the military in the west now that the Indian wars were diminishing, General William T. Sherman recommended a major reorganization of the Army in the west, concentrating troops at fewer posts, abandoning others, and improving quarters at those places retained. As Sherman's recommendations saw implementation during the early 1880s, many western Army posts were substantially improved. Samuel R. Holabird, who became Quartermaster General in 1883, promoted new ideas for changes in Army buildings, including the construction of comfortable quarters for officers and their families and the improving of construction standards by hiring out contracts to civilians. Hoagland notes:

Congress endorsed Holabird's suggestion, adding a provision to the army appropriations bill for 1885 requiring that construction work be contracted out to civilians. In advertising for contractors, post quartermasters had to provide accurate plans and specifications, which were beyond their capabilities.¹²⁹

In 1888, one of Quartermaster Holabird's programs introduced the consolidated post mess in place of company messes. The idea was to provide better cooking, better service, and more economy. Additionally the plan was to gain more living space in company barracks, including separate rooms for noncommissioned officers. Although the idea of a consolidated mess eventually was pronounced unsuccessful, it was "continued post by post for several years," although not in a uniform fashion.¹³⁰

By 1889 the U.S. Army had accomplished considerable construction work at the western posts. Beginning in 1885, when appropriations for barracks and quarters allowed \$229,556 for ninety-seven new buildings at old posts and \$266,797 for repairs to existing structures, allotments for installing and repairing facilities saw steady gains in ensuing years.

Through the last of the nineteenth century, the Army gradually moved toward standardization in architecture. Fewer western posts, a reorganized administrative structure, and rail transportation, all helped the Army's efforts toward a unified approach to building design. Gradually Army personnel could see the advantages of efficiency and economy in standardized architectural design. Hoagland writes:

... Development of military policy, reorganization to create larger units and creation of a new bureaucracy contributed to this modernization... Professionalization was also part of the process of modernization... By taking architectural design out of the hands of staff officers in Washington

¹²⁹Hoagland, p. 311.

¹³⁰Clary, p. 25.

as well as employing civilians on contract rather than soldiers for the actual construction work, the army was both rationalizing production and acknowledging the significance of standards...¹³¹

1900-1919

The end of the Spanish-American War brought extensive changes to organization of the U.S. Army. In 1899 Secretary of War Elihu Root initiated the formation of a "New Army, a modernized force capable of international response" in the twentieth century. As part of this reorganization, the quartermaster general and the post quartermaster became accountable to the same person, thus clarifying lines of authority. With this centralization, the Quartermaster's Department could order officers in the field to build to a standardized plan. Hoagland notes:

Increasing professionalism also led to eventual adoption of standardized architecture. Growing complexity, plumbing, sewerage, electricity, all made barracks and quarters and other buildings too complicated for nonprofessionals at the posts to design and build...¹³²

In November 1901, Secretary Root appointed a board of general officers to establish a plan for locating military posts to best suit the development of the reorganized Army. The newly formed board supported the War Department's policy of increasing the size rather than number of existing posts. Following the board's directives, the Quartermaster's Department used generous funding from Congress to build and repair a large number of barracks, quarters, hospitals and other buildings. The Quartermaster General reported:

'It is safe to say...that a vastly greater amount of construction work was planned, undertaken, and contracted for during the fiscal year 1902-1903 than during any previous year in the history of the Army.'¹³³

The heavy increase in building required the Quartermaster General to augment the regular corps of architects and draftsmen employed in the Construction and Repair Division of his office by hiring a number of temporary employees. Bethanie Grashof notes that in the annual report for fiscal year 1903-1904:

¹³¹Hoagland, 1998, p. 301

¹³²Hoagland, 1998, p. 313.

¹³³Erna Risch, *Quartermaster Support of the Army: A History of the Corps 1775-1939* (Washington DC: Center for Military History, U.S. Army, 1988) p. 581.

The Quartermaster General spoke of an urgent need for additional experienced civilians to aid the officers of the Division of Construction and Repair, an architect, two architectural and structural draftsmen, and others as were needed.¹³⁴

The heavy work demand soon required the Department to hire an experienced architect to oversee the general architectural activities with authority to make revisions to enhance a building's appearance if such action was needed. In order to lessen the agency's expenses, the chief architect was instructed to "eliminate unduly elaborate details of design and construction so that better buildings might be constructed at no increase in cost."¹³⁵

U.S. Army's Quartermaster's Department historian Erna Risch notes that in addition to building or repairing the central military buildings at posts throughout the country, the Department completed other construction projects approved by Congress. Beginning in 1902:

Congress appropriated funds for the construction, equipment, and maintenance of suitable buildings at military posts and stations to be used as post exchanges; schools, libraries; reading, lunch and amusement rooms; and gymnasiums.¹³⁶

This period of intense construction activities soon peaked. As Risch described the playing out of the effort, "Secretary of War Elihu Root" [had been able] to effect some fundamental administrative changes before the crest of the reform wave spent itself in 1904."¹³⁷ As the intense activity involved in improving Army facilities ebbed, "The initial drive for increasing the efficiency of the Army and the War Department soon gave way to the more familiar leisurely pace that had characterized prewar reform efforts." As World War I preparation absorbed the U.S. Army, official attention turned away from facility improvement and toward the logistics of transporting and supplying troops in a brutal and distant war.

1920-1941

Following the end of World War I, U.S. Army budgets contracted. From 1920 to 1926 little money was available for construction budgets. Secretary of War John W.

¹³⁴Grashof, vol. 1, p. 32.

¹³⁵Risch, p. 581.

¹³⁶Risch, p. 582.

¹³⁷Risch, p. 598.

Weeks imposed a period of austerity in 1921 and announced:

No permanent construction will be undertaken where permanent construction can be postponed, and only such repairs and temporary construction necessary will be considered.¹³⁸

In 1926, a program known as the "Ten-year Construction Program" evolved when Congress enacted Public Law No. 45 authorizing the Secretary of War to dispose of:

43 military reservations, or portions thereof, and to deposit the money received from those sales into a special fund designated the "Military Post Construction fund", which money would remain available for permanent construction at military posts until it had been fully expended.¹³⁹

For the ensuing ten years the Army saw increased funding available for building construction. Risch reported that the program would "replace with proper permanent buildings the temporary structures erected during the war, many of which were still in use."¹⁴⁰ In the late 1920s and early 1930s, gradually new brick and stone buildings began to replace the many older structures on Army installations around the country.

With the beginning of the Great Depression, Congressional funding allotments supplemented Public Works Administration monies to support programs that relieved unemployment in the country. The Emergency Relief and Construction Act of July 21, 1932, set aside over \$15 million for housing at Army posts. The Army's housing construction program accommodated federal efforts to reduce unemployment. During the later part of the 1930s, enrollees in various New Deal programs assisted substantially in completing military projects.¹⁴¹

As World War II loomed, the flourishing construction program of the 1930s came to an end when the Adjutant General's Office directed that construction of family quarters for married officers and non-commissioned officers would be stopped "for the time being."¹⁴²

¹³⁸Grashof, vol. 1, p. 42.

¹³⁹Grashof, vol.1, p.43.

¹⁴⁰Risch, p. 713.

¹⁴¹Clary, pp. 196-200.

¹⁴²Risch, p. 714.

Summary: Vancouver Barracks Building Development

The re-establishment in 1879 of Vancouver Barracks as headquarters of the Department of the Columbia preceded dramatic developments in U.S. Army organization and building development by just a few years. As part of its revised priorities in the early 1880s, the Army focused new attention on the post and initiated a major expansion of facilities. Although officials retained several structures that remained from earlier decades, increased funding meant construction of new administrative, medical and residential buildings at Vancouver Barracks. Buildings erected during the 1880s included a hospital, double officers' quarters, infantry barracks, headquarters buildings, single officers' quarters, a "dead house" or mortuary and a hospital steward's residence. Construction slowed at Vancouver Barracks as elsewhere with the nationwide economic depression of the 1890s.

The availability of funds for new construction early in the twentieth century, along with the assignment of the Twenty-Eighth Regiment to Vancouver Barracks, profoundly affected the configuration and appearance of the post's buildings. In recognition of the regiment's installation, the post "received congressional appropriation to improve the existing facilities" and several major buildings, including barracks, a hospital, hospital steward's quarters, post headquarters building and gymnasium were constructed between 1903 and 1907.¹⁴³ Two modest buildings, the Quartermaster's Storehouse and the Mess Hall were constructed in 1914. The American Red Cross began construction of a Convalescent House at Vancouver Barracks in 1918, officially opening the building early in 1919.

Building slowed at Vancouver Barracks and at other posts after World War I. Little new building construction was accomplished at the post as a result of the 1926 "Ten Year Plan," although several important maintenance and remodeling projects involving existing buildings were completed during these years. Important project accomplishments included the installation of new heating systems and the refurbishing of building exteriors and interiors. At the post hospital workers enclosed the north porch and developed the basement storeroom into examination and treatment rooms. Selection of the post as district headquarters for regional Civilian Conservation Corps administration in the early 1930s resulted in construction of several temporary buildings to support that project.

During the late 1930s, federal funding from various sources led to completion of the first major new construction project at Vancouver Barracks in several years. In February 1937, the *Portland Oregonian* announced that a special bill for a "general army

¹⁴³Kristin L. Baron, "Vancouver Barracks Physical History Reports, Buildings 607, 614, 636, 638, 721, 991" (Vancouver, Washington: Fort Vancouver National Historic Site), p. 1.

post construction program" had authorized \$364,600 for Vancouver Barracks to include building seven new brick duplexes for family housing:

... The program recommended for the Vancouver post calls for construction of non-commissioned officers' quarters at an estimated cost of \$255,000; officers' quarters, \$75,000, radio transmitter building, Pearson field \$9600; telephone system \$5,000 and a garage \$5000.¹⁴⁴

The following year, an area newspaper announced that additional funding and labor would be available for projects at Vancouver Barracks:

Further repairing and renovation of old buildings and general landscaping at Vancouver Barracks has just been authorized through presidential approval of a WPA project to continue work started last winter when nearly 500 men were employed on three projects...

An allocation of \$74,901 has been approved for the work which includes repairing and modernization of public buildings for barracks and officers' quarters. Roofs will be reconstructed, buildings will be completely decorated both inside and out, new plumbing and wiring and new heating units will be installed.¹⁴⁵

¹⁴⁴Portland *Oregonian*, Feb. 13, 1937, 2:22.

¹⁴⁵Oregon *Daily Journal*, August 31, 1938, p. 8.

Design Elements of Military Administration Buildings and Barracks 1880-1899

The construction of most late 19th century U.S. Army administration buildings and barracks was based on plans distributed by the quartermaster general's office. In the years preceding architectural standardization, the Army leadership's largest concern was in developing buildings that were both economical and efficient for military use. While official plans determined the size and configuration of buildings, and elevations suggested appropriate basic design, decisions concerning building materials and stylistic details were left to the local post quartermaster.

In 1872, Quartermaster General Montgomery C. Meigs issued a number of plans for Army buildings, an action that saw broad impact on military building. Regarding this event and its affect in the American West, architectural historian Alison Hoagland writes,

In reality, these plans became models, "a suggestion of a design, something to adapt and elaborate – rather than "standardized" plans to be adopted wholesale...

...[These] model plans received wide distribution and served as the basis for a large quantity of subsequent military construction in the West. Post quartermaster's took from them what they needed most, adapting the plans in an effort to comply with regulations regarding the number of rooms, which was their greatest concern.¹⁴⁶

Elevation views of Quartermaster General Meigs 1872 barracks plans indicate an architectural design with simple elements of Classical Revival Style. This style reflected a national interest in the aesthetic and democratic spirit of the Greeks and Romans and in appearance demonstrated an impression of strength and permanence. As architectural historian Carol Rifkind observed:

In a young country, the Greek Revival symbolized a past that was missing; more significantly, in an ambitious country, the Greek revival held the promise of a great future.¹⁴⁷

Characteristics of the Greek, or Classical Revival Style apparent in the 1872 model

¹⁴⁶Hoagland, 1998, p. 302.

¹⁴⁷Carol Rifkind, *Field Guide to American Architecture* (New York: New American Library, 1980) p. 180.

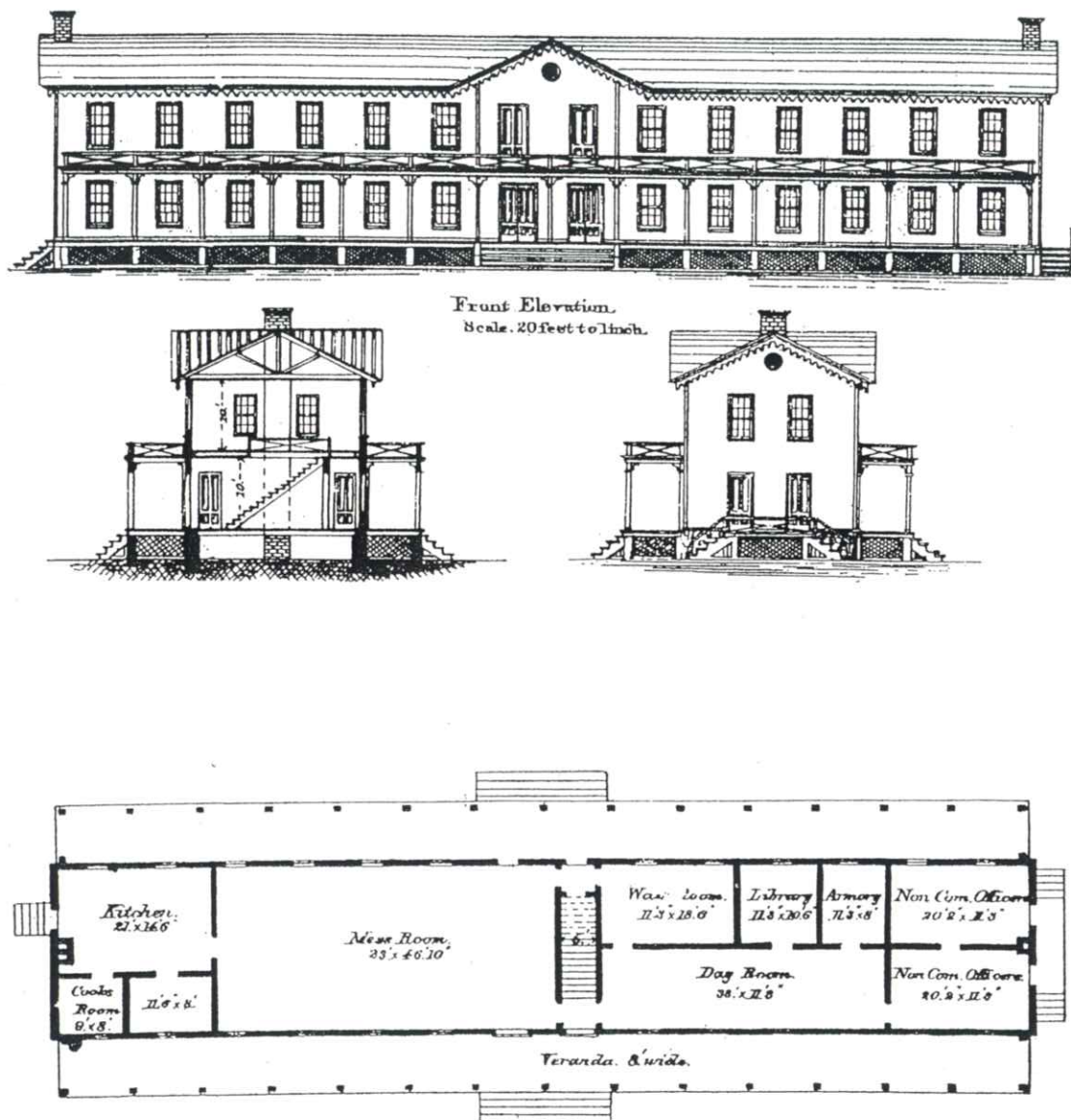


Figure 25 1872 barracks plan established standards for this common building.
From Hoagland, 1998

included bilateral symmetry in organization, a low pitched gable roof, a two-story columned veranda and double-hung multi-light windows. (See Fig. 25) Kristen L. Baron notes that as actually constructed “19th century wood frame military barracks were often designed using subtle combinations of both the Italianate and Greek Revival styles.”¹⁴⁸ The former style, popular in the West in the mid-19th century and remaining in use in later decades, was characterized by wood frame construction, low pitched hipped or gable roof and overhanging eaves, decorative brackets and tall windows.

With only suggestions concerning design elements emerging from Washington, the individual post quartermaster’s authority to make final decisions concerning style and materials resulted in a range of architectural expressions at western Army posts. While construction often followed the official floor plans for barracks, a post’s quartermaster might incorporate Classical Revival exterior details, or he might choose a vernacular interpretation and select local indigenous materials for use in construction. In the 1870s at Fort Douglas, Utah, for example, Jody Stock describes construction in which design decisions diverged significantly from the model:

... Specifications stipulated the plan and form of the buildings, but... the materials and stylistic details were left to the discretion of the local quartermaster... [He] selected red sandstone quarried from nearby Red Butte Canyon. Instead of the Classical Style suggested by the plans, [he] used decorative elements such as finials and bargeboards in the contemporary Gothic Revival Style.¹⁴⁹

Regardless of their stylistic influence, nineteenth century U.S. Army buildings were never among the most elaborate examples of their type or style. Concerns for economy always demanded construction of simpler, more austere buildings.

Despite many instances of distinct, local interpretations of suggested design, a large number of late 19th century administration buildings and barracks incorporated typical design features of the Classical Revival Style. Describing the tradition of the style, architectural historian Elisabeth Walton Potter writes,

The Classical Revival style was based on ancient Greek and Roman archetypes... The revival was an outgrowth of the Romantic Movement, which molded artistic expression in Europe and the new republic of the United States of America in the early years of the 19th century. In this period, Greek and Roman temples were the preferred models for building of all types... With the opening of the overland trail.... the builders who

¹⁴⁸Baron, p.1.

¹⁴⁹Jody Stock, *Overlays of History: the Architecture of Fort Douglas, Utah, 1862-1995* (Salt Lake City: University of Utah, 1996) p. 14.

came west to take up land or work in the settlements translated the classical idiom to wood technology.¹⁵⁰

The fact that the Classical Revival Style remained in use in the West long after its introduction by settlers is testimony to the frequent employment of building styles long after their original period of use.

Building 607 Infantry Barracks

The Infantry Barracks (607), built in 1887 to house 48 men, is the sole remaining nineteenth century building in Vancouver Barracks' historic core that retains major elements of its historic plan and architectural design.

For late nineteenth century U.S. Army buildings that preceded architectural standardization efforts, it is worthwhile to examine how extant barracks structures followed or departed from the official ground plans set forth for construction in the field. The Inventory of Standard Plans for Army buildings at the National Archives (Appendix) shows 31 variations on what must be considered the basic single barracks plan. Plan 121, figure 27, shows a barracks with a facade similar to Building 607, but with a rear wing. The Vancouver Infantry Barracks configuration bears a marked likeness to the plans issued by Quartermaster General M.C. Meigs in 1872. Although the historic use of spaces differs in some instances between the model plans and the barracks as constructed, the two buildings show obvious similarities.

Meigs' 1872 barracks model comprises two stories with six bays on each side of the central opening; outside dimensions measure 23' x 133' (excluding the porch). The ground floor contains a mess room (23' 10" by 46' 10"); a kitchen, washroom, library, non-commissioned officers' quarters and a day room that measures approximately 22' x 11' 6". Vancouver Barracks' Infantry Barracks measures approximately 25' x 134' in outside dimensions. (On both buildings the porch was designed to add an extra eight feet).

It is possible that access to the consolidated mess constructed at Vancouver Barracks in the 1880s allowed the post quartermaster to rearrange uses of interior spaces to include a day room in place of the mess specified on the model plans.¹⁵¹ Measurements of the Vancouver Infantry Barracks day room are 23' x 44' 6" almost

¹⁵⁰Elisabeth W. Potter, National Register of Historic Places Nomination of the Wolf Creek Tavern, Wolf Creek, Oregon, 1998.

¹⁵¹Erigero, p. 296.

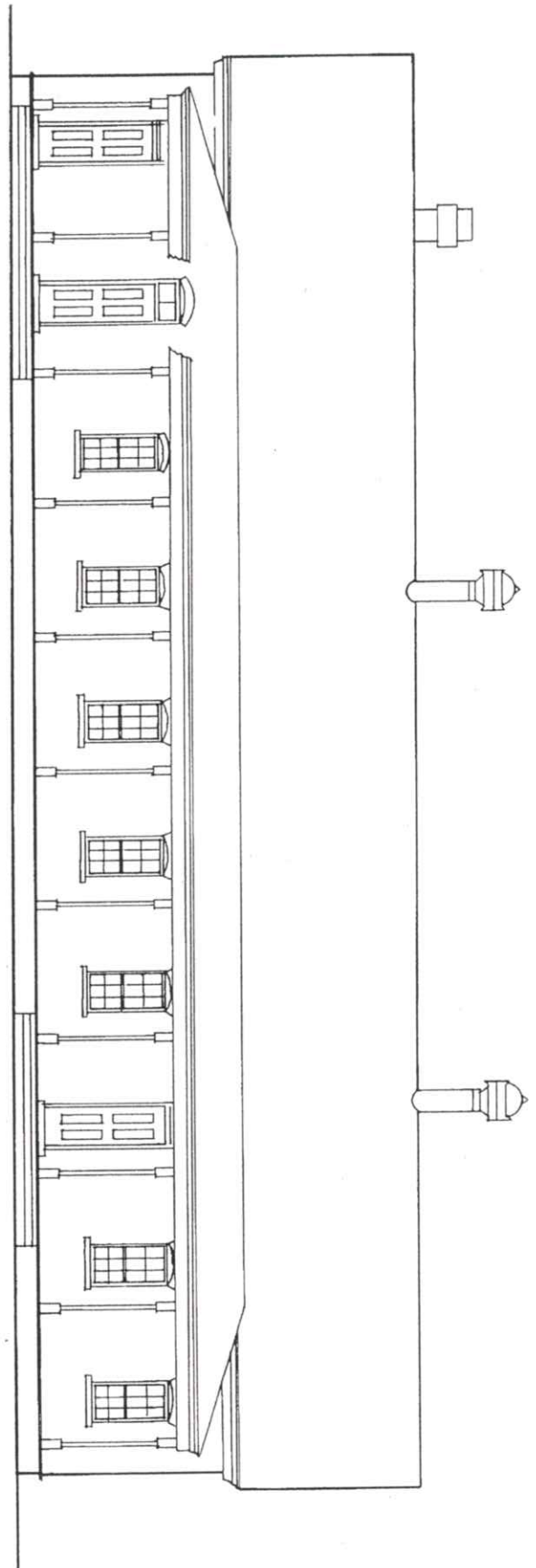


Figure 26 Barracks plan incorporating QM General M.C. Meigs' model for standardized barracks. Hoagland, 1998

identical to those of the 1872 plan's mess. The reading room at Vancouver Barracks measures 38' 5" x 11' 9"; measurements of the corresponding space in the 1872 plan are the same. Similar comparisons throughout the buildings confirm the likelihood that the Vancouver Infantry Barracks builders had Meigs' plan (or a subsequent but similar one) in hand as they worked.

In its simple appearance, the Infantry Barracks (607) reflects characteristic elements of the Classic Revival Style. The building is of wood frame construction distinguished by a low-pitched gable roof with boxed cornices, symmetrical façade, and horizontal drop siding. Upper gable ends on the north and south elevations contain triangular wooden attic vents with horizontal louvers. Windows on both the first and second stories are four-over-four double-hung sashes. A four-light transom is positioned over the front door. Pedimented moldings cap the windows and original doors; door and window surrounds remain simple in design. Foundation level windows are fixed, with six-light and nine-light windows.

Historic photographs indicate that the Infantry Barracks originally had a two-story porch with cross-braced railing that extended across the west elevation and façade. This railing is noticeably similar to that shown in the 1872 model elevation drawing (See figure 26). Supported by chamfered posts, the original Vancouver Infantry Barracks porch with cross-braced railing extended the length of the second story. Additional historic photographs indicate that the Army removed the Infantry Barracks second story porch before 1917 and constructed a shed roof over the first story porch, adding cross bracing to the lower level.¹⁵²

Character Defining Features

Infantry barracks architectural features typical of the Classical Revival Style:

- Rectangular two story building with (presently) one story veranda
- Bilateral symmetry in façade organization
- Gable roof with louvered ventilator; boxed eave cornices
- Horizontal drop siding; plain corner boards and frieze boards
- Triangular louvered vents at north and south gable ends
- Slender chamfered porch supports
- Exterior window trim capped with pediments
- Four-light transom over primary entry door
- Multi-light (four-over-four) double-hung windows

¹⁵²Baron, notes on Bldg. 607.



6 SHEETS (121) SHEET NO. 1

ONE COMPANY BARRACK

Q. M. G. O. APR 6 1898.

SCALE: 1/8" = 1" H

Design Elements of Military Administration Buildings and Barracks 1900-1919

With the increased professionalism of U.S. Army organization that followed the Spanish American War came steady movement toward standardization in military building design and construction. Soon after 1900, the Washington DC Office of the Quartermaster General provided standardized building plans, including floor plans, elevations and instructions, for all new military construction around the United States. In describing the visual impact of the standardization, architectural historian Alison Hoagland states:

In 1905 [the Quartermaster General's] office hired its first staff architect, Francis B. Wheaton, to revise the standardized plans and specifications for barracks and quarters, resulting in the production of ever more efficient and less costly designs. With standardization posts took on an increasingly uniform appearance, not only within the post but also in relation to other posts...

The effect of standardization was evident in the landscape, as the regimentation and uniformity evident in other aspects of the army carried through to its buildings. Identical architecture appeared in very different places, lending a monolithic image to the army and a united military presence to the nation.¹⁵³

Architects found the Colonial Revival Style appropriate for the major new buildings planned for U.S. Army installations at the beginning of the twentieth century. The traditional architecture and historic references revealed in formally trimmed red brick buildings were well suited to symbolize a dignified federal presence. "The red brick and white trim of the Colonial Revival style was deemed appropriate... for most posts across the country..."¹⁵⁴ Describing new buildings erected at Fort Douglas in Utah after the turn of the century Jody Stock noted that the new barracks "reflected an image of professionalism [and] were truly institutional in both size and style, in appearance similar to schools, hospitals and other government buildings..."¹⁵⁵

¹⁵³Hoagland, 1998, p. 313.

¹⁵⁴Hoagland, 1998, p. 313.

¹⁵⁵Stock, p. 26.

Typical design characteristics of Colonial Revival Style buildings whether of wood frame or brick construction, include low pitched hipped or gable roofs, a rectangular form with formal façade arrangement with bilateral symmetry, classical entablature and cornice returns, and double-hung windows. Depending on the complexity of the building other features might include a central portico, dormers, Palladian windows, fanlights and transoms.¹⁵⁶

Major buildings at Vancouver Barracks designed in the style include the Double Infantry Barracks, the Post Hospital, the Administrative/Headquarters Building, Gymnasium and Red Cross Convalescent House. More modest examples are found in the Mess Hall and Quartermaster's Storage Buildings.

Building 638 Double Artillery Barracks

The two and one-half story Double Artillery Barracks (Quartermaster Plan 75-K) was designed in the H-shaped plan with a central portion and end wings. This plan was used extensively for barracks construction at other posts in the West including Fort George Wright in Washington, and Fort Douglas in Utah.¹⁵⁷ The wood frame Double Artillery Barracks building has a stone foundation, slate roof and interior brick chimneys. The building façade exhibits characteristics of the Colonial Revival Style including rectangular shape, wood frame construction and horizontal board siding, gable roof, symmetrical organization, full-length porch with simple entablature and Tuscan columns as porch post supports, and double hung sash windows. Additional characteristics include a transom over the central entry, Palladian windows in the gable ends, and a boxed cornice with eave returns and decorative frieze board.

Figure 28 is the detail sheet from Plans 75K, showing the plans for the interior and the exterior columns, the stair details, and the moldings and window trim

Character Defining Features

Rectangular shape
Extensive clear interior spaces
Wood frame construction

¹⁵⁶Hoagland, 1998, p. 313.

¹⁵⁷Stock, p. 20.

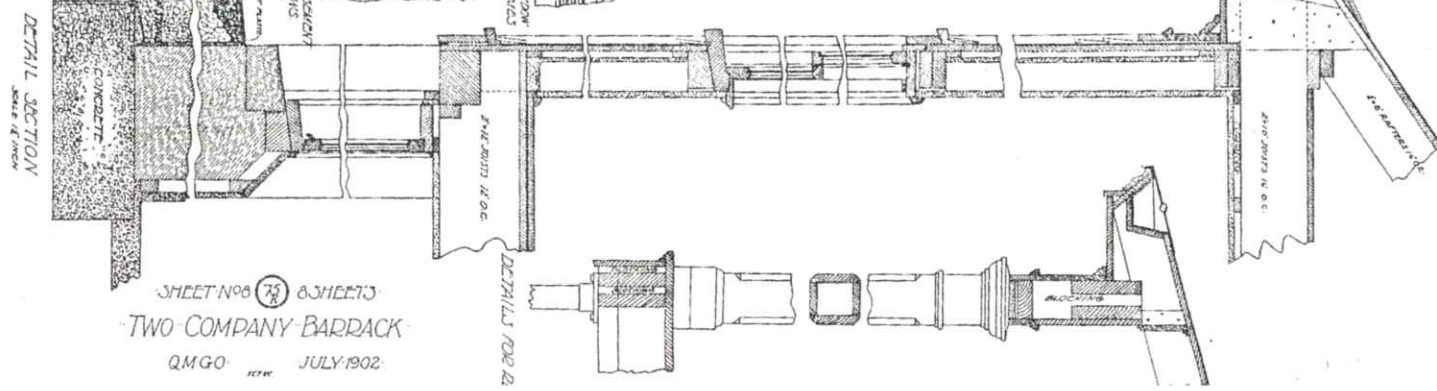
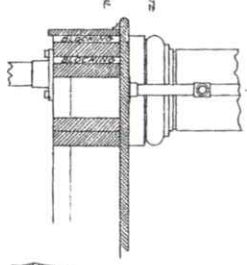
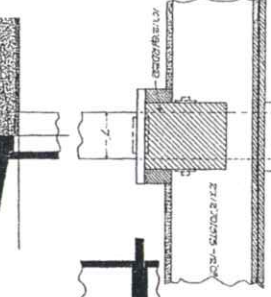
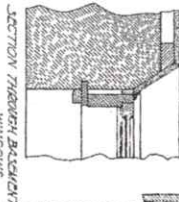
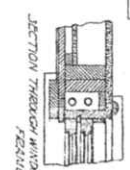
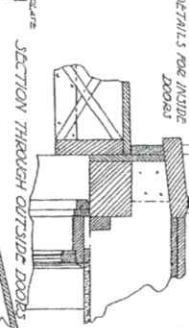
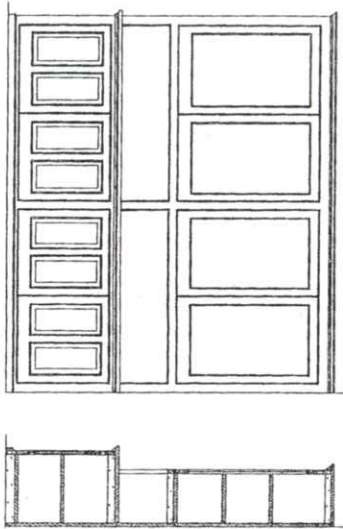
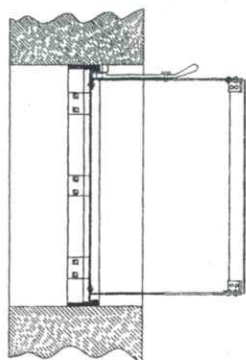
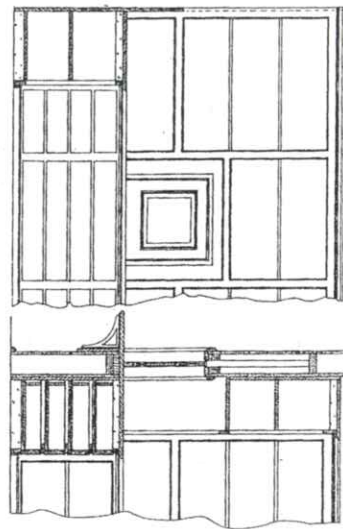
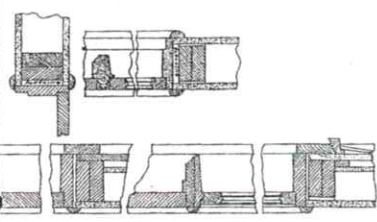
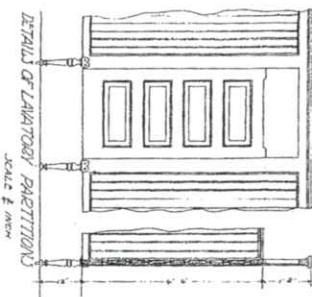
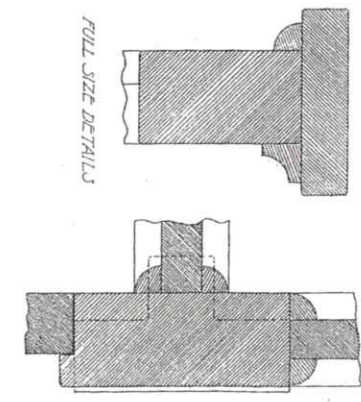
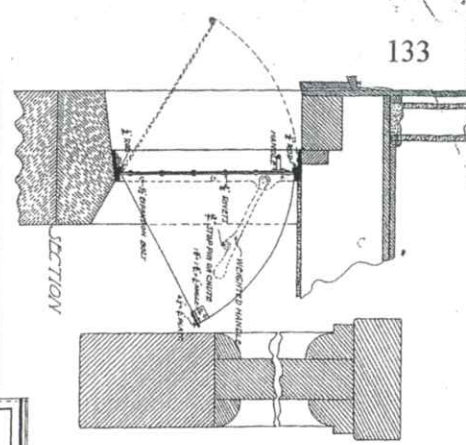


Figure 28 Detail sheet from QMO Plan
#75K, plans for the Double Artillery Barracks
(638) National Archives

Symmetrical organization
 Horizontal board siding
 Gable roof
 Tuscan columns
 Double hung sash windows
 Palladian windows
 Transom
 Boxed cornices and eave returns

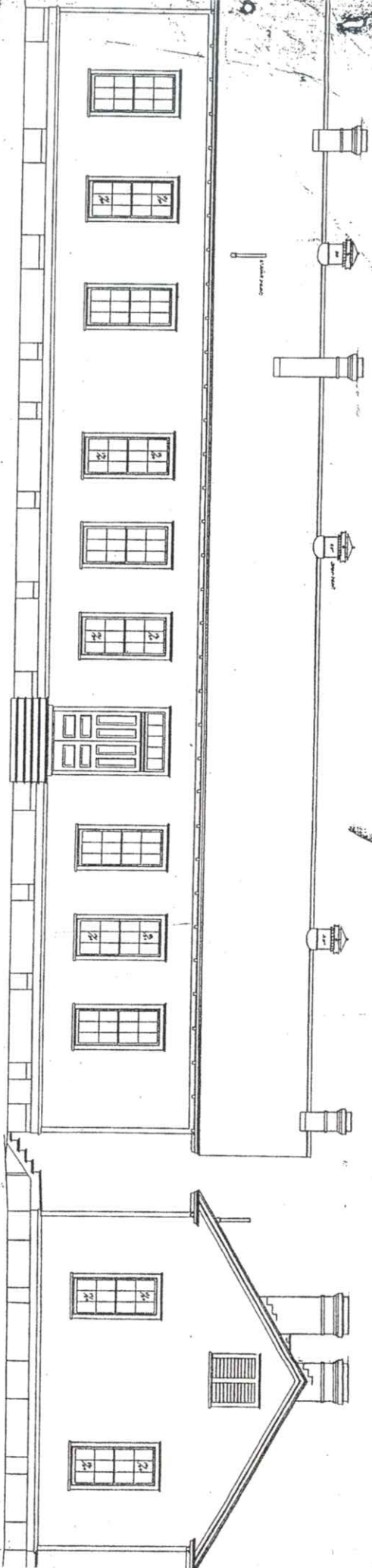
Building 628 Mess House with Kitchen

Constructed in 1914, the Vancouver Barracks Mess Hall is a one story, rectangular, wood frame building with a low-pitched gable roof and horizontal wood siding. As originally designed, the building was vernacular in style with simple references to the Colonial Revival Style. The Mess Hall is rectangular in shape and symmetrical in arrangement. It has a gable roof, simple cornices and frieze boards, horizontal wood siding with plain corner boards; double hung sash windows and simple window trim.

Figure 29 shows the original plans from the National Archives for a Mess Hall similar to Building 628, which is Army Standard Plan 93. The detail sheet for Plan 93 (figure 30) shows interior detailing that has been lost in Building 628 through renovations.

Character Defining Features:

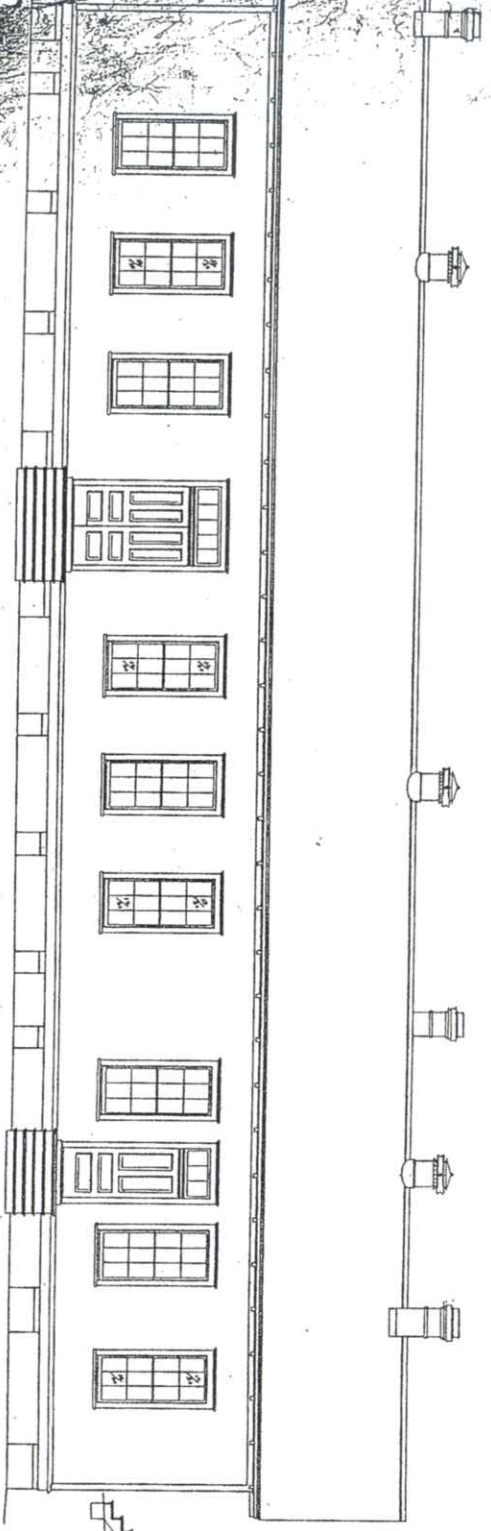
Rectangular shape
 Gable roof
 Simple cornices and frieze boards
 Wood siding and plain corner boards
 Double-hung sash windows
 Window trim with simple pedimented cap.



— ELEVATION FRONT SIDE —

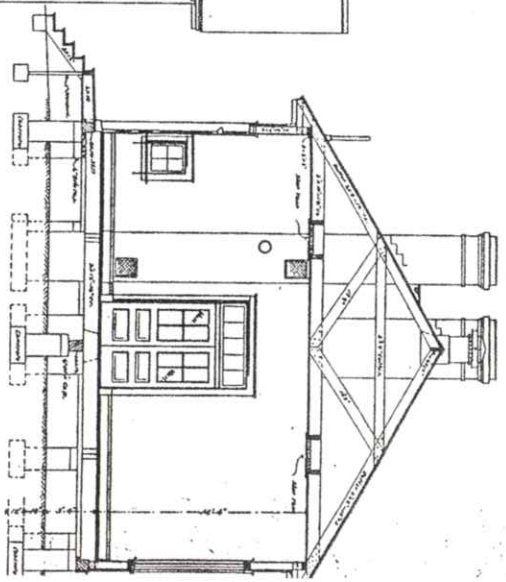
— END ELEVATION —

Architect's Office



— ELEVATION ON CHARLOTTE ST —

Architect's Office

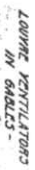


— CROSS SECTION —

SHEET 1. 93
MESS-HALL AND KITCHEN
— AT —

OR 160 - JULY 1894 - SCALE 1/4 INCH

Figure 29 QMO Plan 93, probably source for buildings 628 and 630 National Archives collection



National Archives Collection



116. A.
QUARTERMASTERS STOREHOUSE
AT

Building 630 Quartermaster's Storehouse

This building was built in 1914 in the same building project as Building 628. Plan numbers are not indicated on the post's Engineering Office forms for the building. There is no building report for either of the 1914 buildings (630 and 628) in the Quartermaster General's Correspondence Files at the National Archives. Post building records for 1930 indicate that building 630 (then 167) was a mess hall, or "Mess House." On February 21, 1936, the building was changed to a storehouse and was used to store Spruce Production Corporation records. The Spruce Production Corporation was the successor agency to the Spruce Production Division. Plans on file for 1953 show no evidence of ranges for cooking. The interior was divided into six rooms with a bathroom at this time. A more recent re-model has divided the building into ten rooms and added a small kitchen. There has also been a recent fire.

Buildings 631 and 628 are very similar and could have been built from a common set of plans. The width of both buildings is 26' 3". Building 628, with the kitchen, is 100' long, and building 630 is 70' 4" long. The kitchen area adds 24' 11" to the total length of building 628. Without the kitchen, building 630 and 628 are comparable in size, with 1729 square feet for 628 and 1639 square feet for 630. A plausible explanation might be that the two buildings were intended to be mess halls with a common kitchen in Building 628.

Standard plans for the Quartermaster Storehouse buildings, however, show plain structures of frame and masonry construction similar in layout to Building 630. Figure 31 shows the foundation sheet for Plan 116A, which was a Quartermaster Storehouse built in frame and masonry versions on numerous posts around the U.S.

A simple, vernacular building, it is compatible in its form and materials with more elaborate Colonial Revival Style buildings at Vancouver Barracks. Like building 628, the Quartermaster's Storehouse is rectangular in shape, of wood frame construction, with a gable roof. Sheathed in horizontal wood siding with plain corner boards, the building has two-over-two double hung sash windows with simple pedimented caps.

Character Defining Features:

- Rectangular shape
- Gable roof
- Simple cornices and frieze boards
- Wood siding and plain corner boards
- Double-hung sash windows
- Window trim with simple pedimented cap.

Design Elements of Military Hospitals

During the last decades of the nineteenth century, responsibility for U.S. Army hospital design was assumed by the Surgeon General's office. As Alison Hoagland notes:

Hospital designs originated at the posts, but required approval by the Surgeon General's office as well as the quartermaster general's office. To assist post surgeons and quartermasters, the Surgeon General's office published a series of model plans beginning in 1867.¹⁵⁸

In revised hospital plans issued by the Surgeon General in 1877, drawings featured a two-story main block with one-story wings extending on each side for use as wards. Reflecting the latest theories regarding the necessity of fresh air for healthy conditions, this arrangement, known as the "pavilion" plan, was created to provide recovering patients with adequate cross ventilation.¹⁵⁹

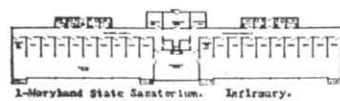
In general, the pavilion plan for hospital design was associated with the sanatorium movement in Europe, which emphasized exposure to fresh air and sunlight as therapy for tuberculosis and other ailments. Patients were encouraged to rest out of doors or even to sleep out of doors whenever possible. Sunlight, through a physical regimen known as "heliotherapy," was also seen as beneficial. A survey of hospital plans current at the turn of the century shows many variations on the pavilion plan with sleeping accommodations on sheltered verandas and a southern exposure (figure 32).¹⁶⁰

Specifications for the Surgeon General's 1877 plan stated a preference for wood construction, but stone, brick, or even adobe materials could be used, depending on the hospital's intended location. Hospitals designed in the pavilion plan appeared at many Army posts including Vancouver Barracks in 1884. Other examples appeared at Fort Laramie (1873-1874) and Fort D.A. Russell (1887).

¹⁵⁸Alison Hoagland, *Military Accommodations: Architectural Adaptations at Three Wyoming Forts*, (Salt Lake City: University of Utah, 1997) p. 24.

¹⁵⁹Hoagland, 1997, p. 24.

¹⁶⁰For hospital design of the period, see Thomas Spees Carrington, *Tuberculosis Hospital and Sanatorium Construction*, (New York: National Tuberculosis Assn., 1911) p. 26ff.; See also, Thomas Dormondy, *The White Death, A History of Tuberculosis* (New York: New York University Press, 1989) p. 170; Katherine Ott, *Fevered Lives: Tuberculosis in American Culture since 1970* (Cambridge: Harvard University Press, 1996), p. 87-99.



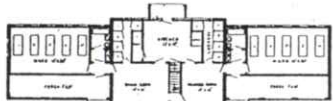
1-Maryland State Sanatorium, Infirmary.



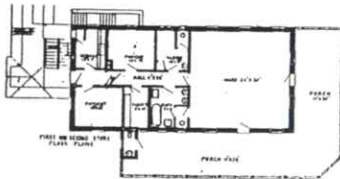
2-Municipal Sanatorium, Otisville, N. Y.



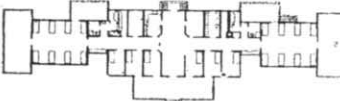
3-County Sanatorium, Hartford, Conn. Infirmary.



4-Design for Hospital (advanced cases)



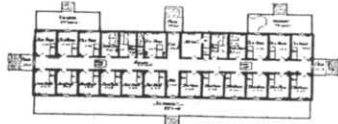
5-Isolation Hospital, Paterson, N. J.



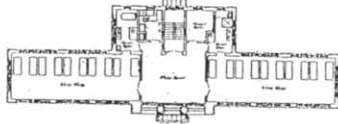
6-Georgia State Sanatorium, Infirmary



7-Indiana State Sanatorium, Rockville, Ind.



8-U.S.A. Hospital, Ft. Bayard, N.M., Officers Quarters.



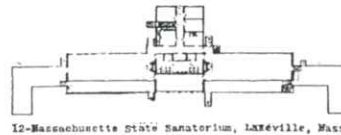
9-Riverside Hospital, New York City.



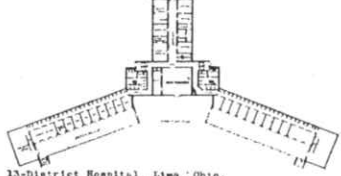
10-Lake Edward Sanatorium, Quebec, Canada.



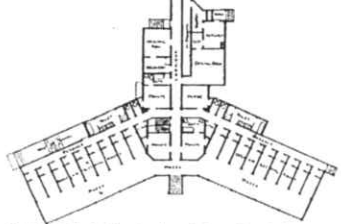
11-U.S.A. Hospital, Ft. Bayard, N.M., Ward 2.



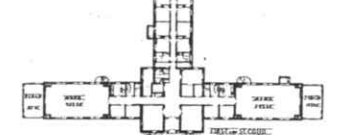
12-Massachusetts State Sanatorium, Lakeville, Mass.



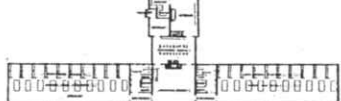
13-District Hospital, Lima, Ohio.



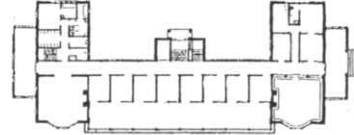
14-Maine State Sanatorium, Hebron, Me., Infirmary



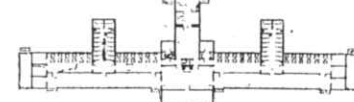
15-Tuberculosis Hospital, Washington, D. C.



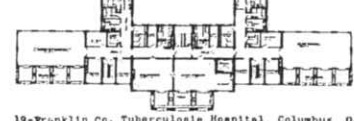
16-Association Sanatorium, Colorado Springs, Colo.



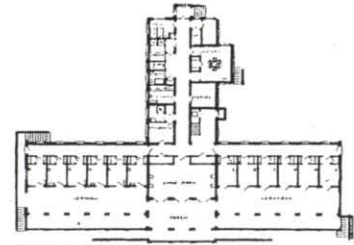
17-Jewish Hospital, Beltspring, Md.



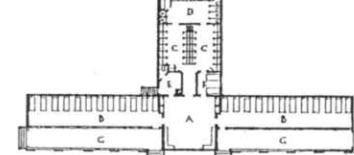
18-Redwood Sanatorium, Md., Infirmary.



19-Franklin Co. Tuberculosis Hospital, Columbus, O.



20-Ohio State Sanatorium, Infirmary



21-Boston Consumptives' Hospital, Mattapan, Mass.

—Comparison of the Floor Plans of Infirmarys, Reception Hospitals, and Buildings Housing Advanced Cases. THIS PLATE IS INTENDED TO SHOW THE VARIATION IN THE ARRANGEMENT OF THE BUILDINGS, BUT DOES NOT GIVE INFORMATION IN REGARD TO THE DIMENSIONS, WHICH WILL BE FOUND IN THE TEXT DESCRIBING THE INSTITUTIONS.

Figure 32 Various plans for pavilion-style hospitals built around the US for civilian and military use. From Carrington, 1911

In addition to the distinctive arrangement of the central administrative core and the flanking “wing wards,” the pavilion plan hospitals also had some interior characteristics that came from the sanatorium movement. Perhaps the most striking of these at the time was the absence of any interior molding or trim that could provide a horizontal surface. The 19th century styles featured ornate interiors with picture molding, chair molding, baseboards, wainscoting, and window and door molding with multiple shadow lines. All of this was seen as a breeding ground for bacteria. Interior surfaces were to be as simple as possible, easily cleaned, and vertical. The floor covering of choice was the new material from Europe, linoleum. The cracks in wooden flooring could harbor germs, but linoleum was crack-free and could be sterilized with a mop and carbolic solution.¹⁶¹

During the early years of the twentieth century, as the Army reorganized and moved toward standardization, the Surgeon General’s office continued to oversee plans for U.S. Army hospitals. Development in medical science as well as technological advances accounted for dramatic changes in hospital design and construction. The need to build modern surgeries, to install electrical equipment, and to use sanitary building materials required changes to building configurations.

Even though the Surgeon General’s office was more successful [than the Quartermaster General] in enforcing standardized plans, it still faced the same problems as the quartermaster general. Available building materials varied from post to post; no single design was adequate for every location...costs ranged widely; and post quartermasters and surgeons would always make their own modifications.¹⁶²

Despite the substantial changes in the functional arrangement of U.S. Army hospitals, these buildings reflected the same developments in architectural style as other Army structures of the first decade of the twentieth century. The Colonial Revival Style, firmly establishing a dignified military presence at posts throughout the country, was also used for the hospitals. Whether of brick or wood frame construction, the hospitals incorporated the typical design elements of the Colonial Revival Style including a low pitched hipped or gable roofs, a rectangular form with formal façade arrangement with bilateral symmetry, a classical entablature and cornice returns and double-hung windows. Depending on the complexity of the building other features might include a central portico, dormers, Palladian windows, fanlights and transoms.

¹⁶¹Dormondy, p.170.

¹⁶²Hoagland, 1998, p. 308-309.

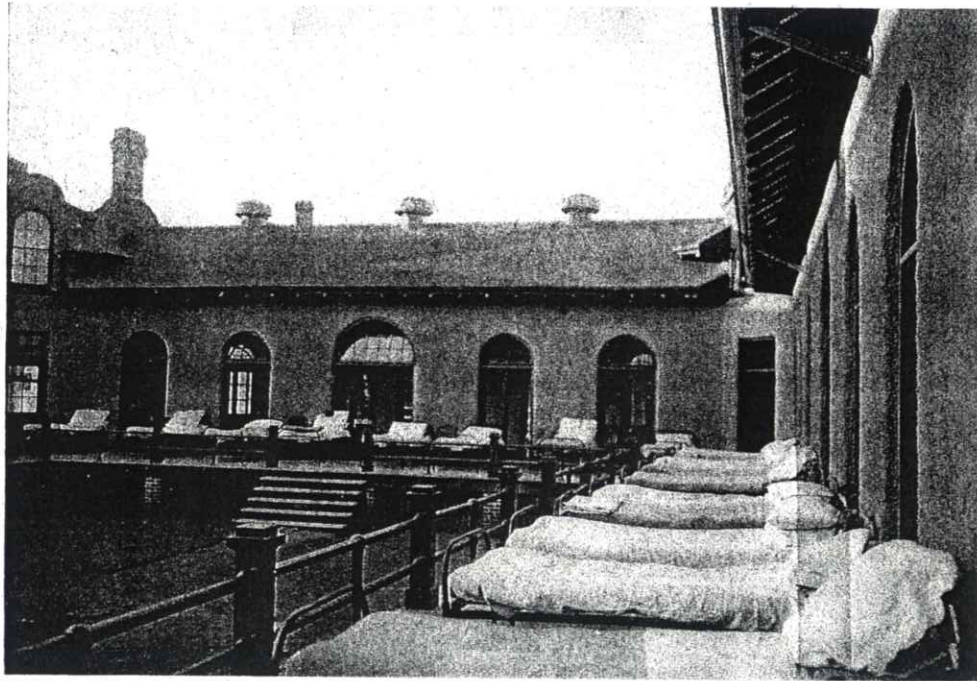


Figure 33 Outdoor sleeping or day-bed arrangements at the Army general hospital, Fort Bayard NM. This regimen was popular as a result of the sanatorium movement in health care.

Building 614 Post Hospital

The Vancouver Barracks Chief Surgeon, Rudolph Ebert, petitioned the Surgeon General for a new hospital in 1902. He cited the 1884 hospital's limited size and outmoded plan.¹⁶³ The Surgeon General responded by sending 14 sets of plans to Vancouver on May 15, 1903. The contract to build the new hospital was let to builders Lister and Scott, apparently a Portland firm. The hospital was completed in 1905, and the old hospital was refurbished as a barracks for Hospital Corps personnel.¹⁶⁴

Elements of the new hospital, as revealed by the floor plans attached to the Building Report, include the following:

First Floor Main Building

- Surgeon's Office
- Assistant Surgeon's Office
- Dispensary
- Hospital Steward's Office
- Dental Surgery
- Wardmaster
- Examination Room

First Floor Annex

- Dining Room
- Kitchen
- Special Diet Kitchen
- Pantries (2)

Second Floor Main Building

- Officers' Ward
- Laboratory
- Operating Room
- Etherizing Room
- Surgical ward
- Acting Hospital Steward's Office

Second Floor Annex

- Dormitories
- Isolation Ward
- Prison Ward

Third Floor Main Building

- X Ray Room

¹⁶³Ebert to Surgeon General, Nov. 11, 1902.

¹⁶⁴Chief Quartermaster, Department of the Columbia to Quartermaster General, March 1, 1906.

Dark Room
 Convalescent Dormitories (2)
 Reading Room

The total number of beds in the wing wards was 48, but the additional beds in the various other special wards brought the number of total accommodations for patients up to perhaps 75-80.

Although the Vancouver Barracks Post Hospital was not constructed from U.S. Army Quartermaster's Office plans, the building's Colonial Revival design characteristics make it fully compatible with other buildings of the style found on the post. Constructed in 1903-1904, the two and one-half story brick Post Hospital reflects early 20th century hospital requirements yet retains the general configuration of the pavilion plan with a central portion flanked by wings.

During the 1930s, the two wings were enclosed with glass and wood siding to create sun porches. The original open verandas would have been hopeless for patients to use in Vancouver's rainy climate. The south wing was enclosed in the early 1930s and the north wing in 1936. The hospital's former rear addition was moved in 1952 to adjoin the south end of the building.

The Colonial Revival stylistic elements incorporated in the building at the time of construction include the rectangular shape of the building, symmetrical façade, brick construction, gable roof over the central portion with boxed cornices, eave returns and frieze board; hipped roof over each of the two side wings; thin chamfered wood posts dividing bays of the sun porches and dormers with pediments and horizontal wood siding in all three volumes. Additional elements include six-over-six double hung sash windows with arched brick lintels, additional multi-light windows, portico with simple squared Tuscan columnar posts and entablature.

Character Defining Features

Building 614 Central Volume

Rectangular shaped volume
 Symmetrical façade
 Brick construction
 Gable and hipped roofs
 Eave returns
 Frieze board
 Dormers with pedimented gables

Arched brick lintels
 Multi-light windows
 Portico with Tuscan columns and entablature
 Cornices on main volume and on sun porches
 Corbelled brick chimneys
 Chamfered columns dividing five sun porch bays on north and south elevations

Interior details include walls with no moulding,
 slanted window wells,
 lack of door or window frames

Building 614 As Modified: Sun Porches

Vertical wood siding
 Multi-light windows

Building 626 Dental Surgery (Dental Surgeon's Office, then Dental Clinic)

Available information suggests that the original portion of this building was built sometime after 1888 and originally located behind the 1884 post hospital where it served as a "dead house" or mortuary. In 1910 this structure was relocated to its present site and perhaps joined to another structure, which is described as a tool shed. The two structures were joined with crossing gables and remodeled for use as a dental surgery. If this account is correct, the Building 626 was not built to any standard plans. The Inventory of Standard Plans (appendix) does not include a specific dental surgery building plan. An early photograph of the building at its present location shows a simple, vernacular wood frame structure configured in a "T" shape with a one-room addition (the tool shed) appended to the rear.

Building 626 has a low, pitched roof, horizontal wood siding, six-over-six light double hung windows, two plain entry doors and an uncovered porch that extends across the front elevation. Historic photographs indicate that prior to 1930 the rear addition was extended and a porch roof constructed. Further alterations occurred after 1940 when workers poured a new concrete foundation, extended walls to the west, and added a new north-south end gable roof structure. In its current form, Building 626 retains the shiplap siding originally used on the building but now has a simple Craftsman appearance with an inset, covered porch and paired one-over-one double hung windows with simple trim.

Character Defining Features

Shiplap siding
 One-over-one light double hung sash windows, paired and single
 Window trim
 Inset porch
 Panel door with single light
 Hipped roof porch overhang

Design Elements of Red Cross Convalescent Hospitals

In the same week in February 1919, the American Red Cross opened two new Convalescent Houses in the state of Washington, one at Vancouver Barracks and one at Camp Lewis. The agency's bulletin for the northwest division described the two as similarly designed, expanding on the newly completed Vancouver Barracks Convalescent House as:

....constructed on the old American colonial style, full concrete basement, stucco walls and painted a rich cream color, restful to the eye... The sun room has unusually fine coloring, tending to stimulate the convalescent men with a desire for renewed health and strength...¹⁶⁵

More precisely, Building 636 incorporates design elements of the Period Colonial and Georgian Styles that flourished between 1910 and the late 1930s. These styles, based on seventeenth and eighteenth century Colonial architecture, differ from the Colonial Revival Style (in use approximately from 1895 through the mid 1910s) in their emphasis on more "correct" historic detailing. Typical characteristics of these period styles include low pitched hipped or gable roofs, bilateral symmetry, a rectangular form, small-paned rectangular windows, dormer windows, fanlights, and sidelights with transoms. Additional elements might include steeples, columns in classical orders, pediments, cornice returns and pilasters.

¹⁶⁵*Bulletin of the American Red Cross Northwestern Division*, February 22, 1919; *The Vancouver Daily Columbian* of February 15, 1919 described the sun room as "a riotous mass of beautiful coloring."

Building 636 Red Cross Convalescent House

Built as economically as possible, the Red Cross Convalescent House nonetheless incorporates distinctive stylistic details of the Period Colonial and Georgian Styles. The wood frame, stucco-clad building has shallow pitched gable roofs. Two significant Period Colonial features, a steeple at the ridge line of the main volume and a balustrade on the south roof, have been removed. The façade of the rectangular two-story main volume is bilaterally symmetrical; a centrally located shallow porch is designed with Tuscan columns supporting an entablature and pedimented gable. Pilastered columns are located behind the full-round Tuscan columns. Fenestration on the façade and side elevations is characterized by six-over-six light, double hung sash windows.

Additional Period Colonial design elements of Building 636 include the boxed cornices with returns, lunettes in the east and west gable ends of the primary volume, a four-light transom over the front entry door.

Character Defining Features

Gable roof
 Steeple
 Entry porch with Tuscan columns and pediment
 Six-over-six light double hung sash windows
 Bilateral symmetry in façade organization
 Gable end lunettes
 Boxed cornice and returns at eaves
 Pilastered columns at front entry
 Transom over front entry door

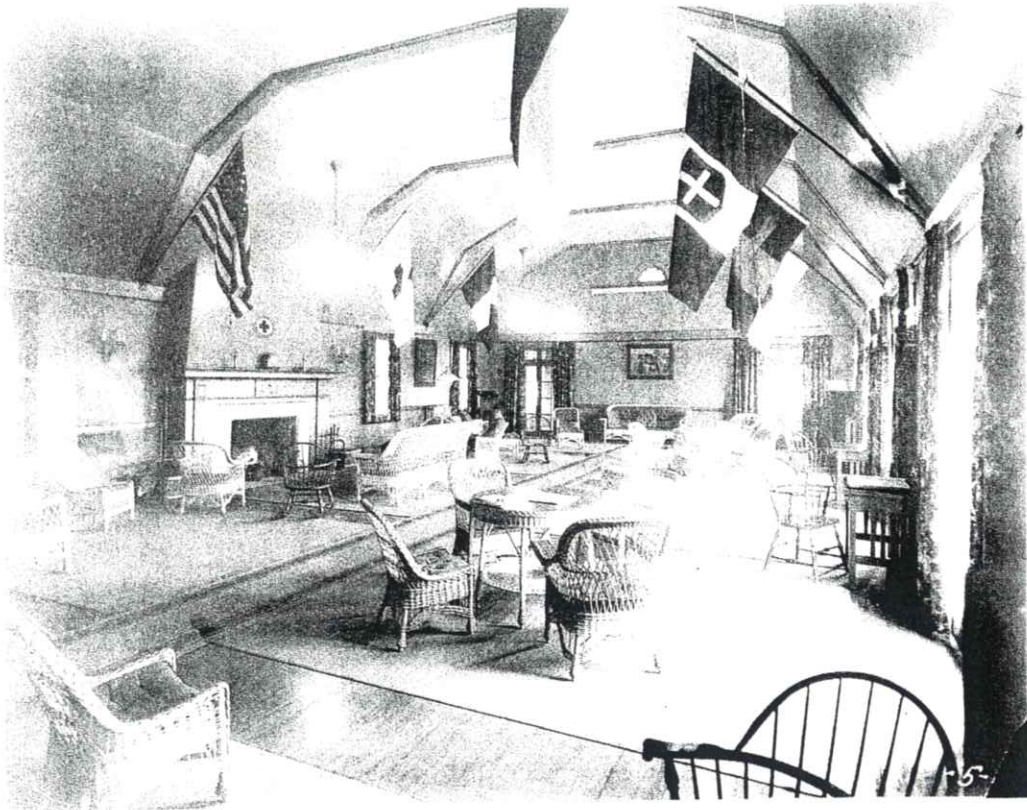


Figure 34 Interior of Red Cross Convalescent House. Clark County HS photo

Design Elements of Army Dependent Housing

19th Century

With U.S. Army reorganization in the early 1880s new non-commissioned officer positions were established at the posts. These new personnel categories led to the creation of standardized family housing for dependents. With goals set to attract and retain high quality, stable, military personnel, the Army instituted a program to provide shelter for families. Essentially, these goals persisted through ensuing decades as increased professionalization in the military demanded competent participants. While standardized designs for quarters for commissioned officers' families were much more likely to be developed in the late 19th century than they were for non-commissioned officers (NCOs), a few standard plans were created for NCO family housing.¹⁶⁶ Hospital stewards were among those noncommissioned officers to be eventually granted their own quarters. In her study of standardized plans for U.S. Army family housing Bethanie Grashof notes:

The construction of separate Steward's quarters is first mentioned in the 1888 "Annual Report of the Quartermaster General"; Congress approved an act which set limits on the construction costs of hospital stewards quarters to \$800, except near cities with a population of at least 50,000 where the limit was set at \$1200.¹⁶⁷

Grashof traces the sources for residential structures to the many editions of builder's books such as works by Andrew Jackson Downing, John Hall and others in the nineteenth century: "After the Civil War these books were supplemented by mail order catalogues for plans and entire houses. From these books came inspiration for many early designs."¹⁶⁸

20th Century

As described earlier, the broad changes made in U.S. Army organization following the Spanish American War led to extensive construction activities at posts throughout the country. New designs provided a fresh look for military buildings.

...Lasting until the declaration of war in 1917, a long series of building

¹⁶⁶Grashof, vol.I, p. 19.

¹⁶⁷Grashof, vol. I, p.19.

¹⁶⁸Grashof, vol.I, p. 22.

designs appeared. Designs for housing, barracks, headquarters, gymnasiums, storehouses, post exchanges and others poured out of the quartermaster's office in Washington, D.C. For family housing alone, there were 82 different plans with anywhere from 1 to 15 variations....¹⁶⁹

Although plentiful, these designs had in common a simplicity that reflected the Army's efforts to achieve economy in their building construction program, "...the elevations tended to become more and more austere as the Army designers took a widely diverging path from the mainstream architects in private practice."¹⁷⁰

Prior to 1920, the Colonial Revival Style, as described earlier, suited an institution desiring connections with the United States origins and traditions. The use of red brick with white painted Colonial Revival details predominated in much of the post construction practice. Design elements of the Colonial Revival Style included a low pitched hipped or gable roofs, a rectangular form with formal façade arrangement with bilateral symmetry, a classical entablature and cornice returns and double-hung windows. Depending on the complexity of the building other features might include a central portico, dormers, Palladian windows, fanlights and transoms.

As the post-World War I U.S. Army improvement program waned, construction slowed at military posts around the country. After 1926 building activities increased anew as part of the "Ten Year Plan," and by the early Depression years additional funds became available for construction.

Describing the effect on U.S. Army family housing of the "Ten Year Plan" Bethanie Grashof writes:

By February 1931, within the continental United States, permanent housing had been provided for 19,800 enlisted men, 304 non-commissioned officers, and 292 commissioned officers. Construction to that date totaled just over \$30 million...By 1933, the total appropriations under this program were nearly \$80 million. [When NRA funds were added]...Approximately \$61 million were received for 660 projects at 65 posts. Of the 1636 buildings, structures and installations built, 1138 buildings were constructed containing a total of 1509 sets of quarters.¹⁷¹

In the later 1930s, Works Progress Administration and Public Works Administration

¹⁶⁹Grashof, vol. I, p. i.

¹⁷⁰Grashof, vol. I, 36.

¹⁷¹Grashof, vol. I, p. 46.

(WPA and PWA) funding led to construction of additional family housing.

For their family housing projects the Army strove to build economical and efficient quarters that also made use of local materials and suited local conditions. As far as style was concerned, the use of traditional styles prevailed:

[The Army] wanted an architecture that would be familiar, that would be properly national in character, yet reflect the architectural styles of the various regions within the United States. Two primary styles, Georgian [or Colonial] and Spanish Mission were adapted for use throughout the country...¹⁷²

Grashof describes three different plan types adopted by the Army for non-commissioned officers' quarters on November 8, 1930:

1. The Ft. Bliss type, to be built in the southern United States as far north as North Carolina and Oklahoma...
2. The Ft. Monmouth type, [a double two-story building] to be built in the north as a general rule...
3. The Ft. Humphries (Ft. Belvoir) type, to be built in the middle latitudes or in the north where single sets were allowed...

Except for buildings incorporating design features appropriate to the American southwest, the non-commissioned officer quarters were designed in the Period Colonial/Georgian Styles that flourished between 1910 and the late 1930s. These styles, based on seventeenth and eighteenth century Colonial architecture, display more ardent historicism than the Colonial Revival Style. Typical characteristics of these styles include low-pitched hipped or gable roofs, bilateral symmetry, a rectangular form, small-paned rectangular windows, dormer windows, fanlights, and sidelights with transoms. Additional elements might include steeples, columns in classical orders, pediments, cornice returns and pilasters.

Building 631 Hospital Steward's Quarters

The Vancouver Barracks Hospital Steward's Quarters (now substantially modified) was constructed c.1888 according to plans developed and distributed by the

¹⁷²Grashof, vol. I, p. 49.

Surgeon General's Office in 1886. Grashof attributes the design for the residence as most likely adapted from one of the pattern books. The 1888 Appendix to Circular No. 10, War Department, Surgeon General's Office contains building specifications that appear to be for the two-story Hospital Steward's dwelling in the \$1200 version with specifications also included for the \$800 building. While illustrations do not accompany the extant copy of these instructions, they appear to apply to the Vancouver Barracks Hospital Steward's Quarters as it originally appeared.¹⁷³

The Surgeon General's Office Plan HSQ-1 for a two-story Hospital Steward's Quarters at Vancouver Barracks is known to have been employed at six other U.S. Army locations including David's Island New York, Fort Davis and Fort Hancock in Texas; Fort McHenry in Maryland, Fort Spokane in Washington and Fort Boise in Idaho. Dates for construction of these buildings are 1886 and 1887.¹⁷⁴ Drawings for HSQ-1 show a first floor plan encompassing a parlor, kitchen, hall and pantry. The second floor plan included three bedrooms and a storage room. The front and side elevation sketches show a bay window on the lower story of the façade with a projecting gable above, inset porch, multi-light windows and steeply pitched gable roof.

Design characteristics of the original dwelling define a modest Queen Anne Style cottage with a steeply pitched roof with intersecting gables, asymmetrical or irregular plan, shallow projecting bay on the front lower façade, wood frame construction with horizontal wood siding.

Character Defining Features

An early photograph that predates remodeling of the building clearly reveals similarity to Plan HSQ-1, although variations in its construction occurred. The bay, window arrangement, and roof configuration match the plan. On the Vancouver Barracks a porch with shallow hipped roof, posts and decorative rail, was appended at the front corner of the dwelling. With substantial additions that triple the size of the building and picture windows in the west elevation, the Hospital Steward's Quarters no longer reflects its original plan or appearance. Some Queen Anne design elements however remain. These include:

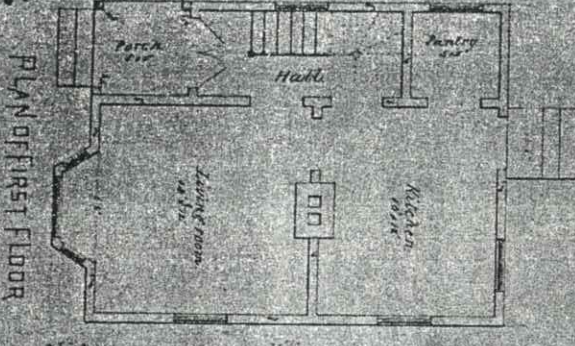
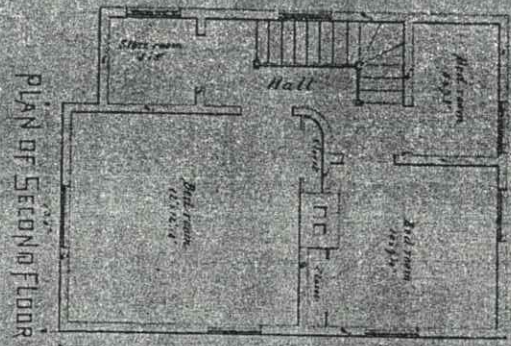
- Three-sided projecting bay on the lower façade
- Eave brackets
- Horizontal drop siding and corner boards
- Tall, narrow windows

¹⁷³Grashof, vol. 2, n.p.; Grashof, vol. 6, p.19023.

¹⁷⁴Grashof cites 1887 as the date for the Vancouver Barracks Hospital Stewards; Quarters construction.



Figure 35 Hospital Steward's Quarters, 1939
This is the original configuration of the front
and east side. National Archives collection



DESIGN
FOR
HOSPITAL STEWARDS QUARTERS

Scale 1/4" = 1'-0"

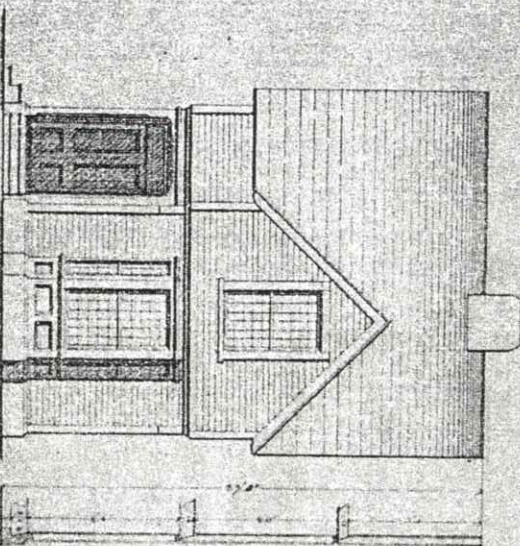
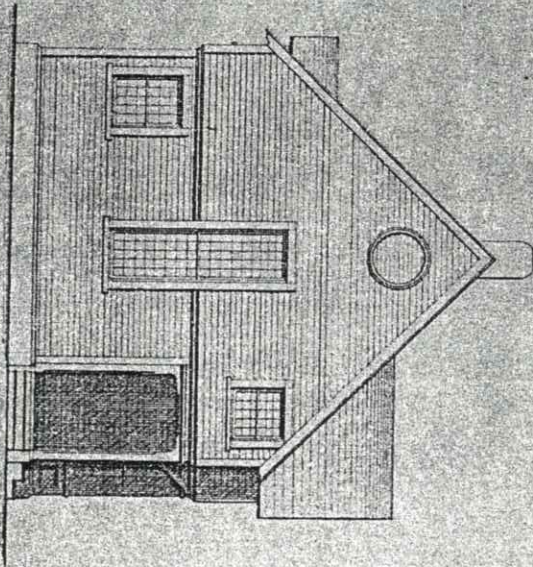


Figure 36 QMO plan for Hospital Steward's Quarters. This is the source of plans for Building 631 From Grashof, 1987



Figure 37 QMO standard plan 87C This is the masonry version. Used for Building 621, Hospital Sargent's Quarters.
National Archives files

THIS PLAN TO BE SUBSTITUTED FOR
CORRESPONDING ONE SHOWN ON
SHEET NO. 1. SEE SPECIFICATIONS.

FIRST FLOOR PLAN

HOSPITAL STEWARDS' QUARTERS

87.0

Building 621 Hospital Sergeant's Quarters

Building 621 was constructed using plans in the QM 87 series. Possibilities include 87-C, 87-H, or one very similar to it such as Plan 87-K (See figure 36). The former plan, which was designed in 1906, is described as a single set of quarters of brick construction with two stories and a cellar. Dimensions for Plan 87-H are almost identical to those of original volume of Building 621, at 21'0" x 28' 1". The floor plan is similar to Plan 87-H with basement, a first floor that contains a parlor, stair hall, dining room and kitchen, and two bedrooms on the second floor.

Like illustrations for Plan 87-H, the Hospital Sergeants Quarters, in its original appearance, displays design elements consistent with the Colonial Revival Style. Built of brick, the main volume has a shallow hipped roof and multi-light windows with arched brick lintels. A covered porch is appended to the entry facade. Building 621 has three bays, a porch with simple Tuscan columns, and entablature and rail.

Building 621 has experienced extensive modifications. At some time prior to 1927, the front veranda was enclosed to create a sun porch and the rear porch was removed for a 16'-8 x 20'-6" one-story wood frame addition. Originally located west of the post hospital, the residence was moved to its current location with construction of the Interstate-5 freeway in 1952. A second one-story wood frame addition was added to the current east side adding a bedroom, a bath, and a basement level garage. Both additions are wood sided with asphalt shingle roofs. An interior furnace flue was removed and a new fireplace and chimney was added to the west wall of the living room.

Character Defining Features

Although Building 621 has seen modifications, (primarily in the filling in of the front porch and a side addition), the central volume retains important architectural features that relate to its original design. These include:

- Rectangular form
- Brick construction
- Hipped roof
- Six-over-six double hung sash windows
with arched brick lintels and sills
- Hipped porch roof
- Boxed cornices with decorative rafter ends

Buildings 635, 644, 665, 641, 642, 643 and 644 Duplexes.

The Vancouver Barracks Duplexes, constructed in 1937-1938 on both sides of Hathaway Road, reflect the Ft. Monmouth NCO-9 Plan described by Grashof.¹⁷⁵ Building Form 117 files from the post Engineering Office identify the plans as Quartermaster plans 625-3571 and 625-3572. Grashof identifies over twenty known locations for this building type, including Vancouver Barracks. Although all in the type are designed as double sets, built with two stories of brick or stucco materials, some designs incorporate hipped roofs; some gable roofs. While some designs include end porches, others do not. Some building examples do not incorporate an entry vestibule. The building report in the National Archives documents the construction with a series of over 100 black and white photos.

The Duplexes at Vancouver Barracks are designed in two basic variations of the Ft. Monmouth style. All are two stories, of brick construction with one story end wings, interior (end) brick chimneys on the main volume and vestibules. Buildings 644, 642 and 664 have masonry vestibules with fanlight windows. Buildings 635, 641, 643 and 665 have hipped roofs and frame vestibules. All of the duplexes retain six-over-six double hung sash windows with narrow flanking multi-light windows on the first story and six-over-six double hung sash windows on the second story. Windows on all the buildings have brick lintels.

Buildings 664 and 643 were relocated on new foundations with the development of Interstate 5 freeway in 1952.

The three multiple-garage buildings associated with the duplexes were built in 1982, according to forms on file at the Engineering Office, Vancouver Barracks. These are Buildings 602, 676, and 673. Field examination confirms the likelihood of this date. Another Building 602 (originally 184) was completed in 1918 and served as a morgue. Building records for 1930-1941 indicate that Building 184 was a morgue and that it was located near the Post Hospital. The Form 117 for this building (184/602) on file at the post Engineering Office lists the building as extant in 1963, and as being used as a garage for quarters. Since the original building 602 does not appear on its original site near the Post Hospital now, we will assume that the new (1982) Building 602 has replaced it.

¹⁷⁵Grashof's discussion of the NCO duplexes can be found in vol. 5.

Character Defining Details

Rectangular form
Bilateral symmetry
Hipped and gable roofs
Brick chimneys
Brick construction
Multi-light windows with brick lintels
Boxed cornices; architrave moulding
Fanlights
Column pilasters and entablatures on vestibules



Figure 38 Building the NCO Duplexes,
1939 Photo from National Archives collection

PHYSICAL HISTORY REPORTS

This part of the Historic Structures Report chronicles construction and changes of the West Barracks buildings. It also includes contemporary photographs and file materials. Historic photographs will be found throughout the report.

The buildings in this section are the minor West Barracks buildings, which are as follows:

Building 621	Hospital Sergeant's Quarters
Building 626	Dental Surgery
Building 628	Mess Hall and Kitchen
Building 630	Quartermaster's Storehouse
Building 631	Hospital Steward's Quarters
Buildings 640 series, 602, 673, 676	NCO Duplexes (7) and garages (3)

National Park service Historian Kristin L. Baron completed physical history reports for the major West Barracks buildings in a separate report prepared in 1998. The major West Barracks buildings are the following:

Building 607	Infantry Barracks
Building 614	Post Hospital
Building 636	Red Cross Convalescent House
Building 638	Double Artillery Barracks

Barron's discussion of these buildings is included as Appendix A in this report.

WEST BARRACKS PHYSICAL INVENTORY REPORT

BUILDING INVENTORY

BUILDING NUMBER: **Building 621**

NAME: Current name: Hospital Sergeant's Quarters
Historic name: Hospital Corps Sergeant's Quarters

PLAN TYPE: Two-story brick residence with hip roof; single story frame additions on rear (south) and east side.

PREVIOUS BUILDING NUMBERS: Building 128

QUARTERMASTER PLAN NUMBER: Not listed on QMC Form 117, probable source is the Quartermaster Plan 87 series

BUILDING CHRONOLOGY:

1907	Building 128 completed for \$4,560,65. Form 173A, on file at post Engineering Office also lists construction dates of 1905 and 1908. Completion photo shows building in original location west of Post Hospital. Front and rear porches are frame and are not enclosed.
1909	Building appears on 1909 list of all post buildings
1910	Install refrigerator
1913	Install 15 window shades
1918	Maintenance expenditure of \$103
1919	Maintenance expenditure of \$254
1920	Maintenance expenditure of \$50
1921	Maintenance expenditure of \$73.83
1924	Maintenance expenditure of \$36.42

- 1930 Install hot air heating system including Excelsior #20 furnace, hot air ducts, cold air returns. Total cost, \$165 from Post Surgeon's budget.
- 1932 Install electric range
Install water meter
- 1934 General Order #21 Oct. 9, 1934 changes building name to Hospital Sergeant's Quarters
- 1937 Interior painting
Repair chimney
Repairs to wiring, plaster, back porch, plumbing \$359
- 1937 Plan on file, post Engineering Office, shows building with frame addition on rear and with front and rear porches enclosed. The rear addition is a full width of the building, 20' 6" and is 16' 8" deep. It is divided into four rooms marked "kitchen, bedroom, store room, and laundry." The front porch is marked "sun porch."
- 1940 Paint (exterior)
Install gas water heater
Install gas range
- 1941 Wash and paint
- 1952 Building moved from original site west of the Post Hospital to new site east of Building 607. Plans on file show underground garage on east side with bedroom and bath over the garage.

SIGNIFICANT FEATURES

EXTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Brick construction
- Horizontal siding
- Slate roofing
- Hipped roof on main volume
- Six-over-six double hung sash windows

- Four-over-one entry porch windows
- Two-over-two sidelights on sunporch
- Arched brick lintels and sills
- Hipped porch roof
- Boxed cornices with decorative rafter ends

EXTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Roofing material on front porch
- Exterior lighting and wiring
- Entry and rear storm doors
- Basement windows, one-over-one window on addition
- Blocked window on second floor, SE corner
- Composition roof on the east addition
- Paint on brick

INTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Window and door trim where original
- Lighting fixtures in period
- Fireplace detailing
- Hardwood floors
- Stairwell millwork
- Doors

INTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Partition walls
- New interior doors
- Bathroom fixtures
- Kitchen fixtures
- Floor materials
- Replacement window trim

OVERALL INTEGRITY

Building 621 retains good integrity on the exterior. The pre-1937 frame addition on the rear is historic and not intrusive. The 1952 addition on the east side is not as well thought out. The roof framing and windows are not in keeping with the rest of the building.

DATE OF SITE VISIT 6/7/02

SOURCES

Erigero, Patricia C., "Draft Historic Overview and Evaluation of Significant Resources of Vancouver Barracks, Fort Vancouver, Providence Academy, Kaiser Shipyards." Seattle: National Park Service, 1992.

Erigero, Patricia C., and Terri A. Taylor. Cultural Landscape Report: Fort Vancouver National Historic Site 2 vols. Seattle: National Park Service, 1992.

Gressinger, Walter, Architects. *Maintenance and Repair Manual for Historic Structures, Vancouver Barracks, Washington*. Seattle: Seattle District, US Army Corps of Engineers, n.d.

National Archives, Record Group 77, Entry 391, "Construction Completion Reports, Vancouver Barracks Washington."

National Archives, Record Group 92, Entry 217074, Box 4944; "List of All Post Buildings at Vancouver Barracks built on or before January 15, 1909."

Quartermaster General Form 173A series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 117 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 515/111 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Van Arsdol, Ted. *Northwest Bastion: The US Army Barracks at Vancouver. 1849 -1916* Vancouver: Heritage Trust, 1991.



Figure 621-1 Front elevation,
faces north

Figure 621-2 Side elevation, faces
west



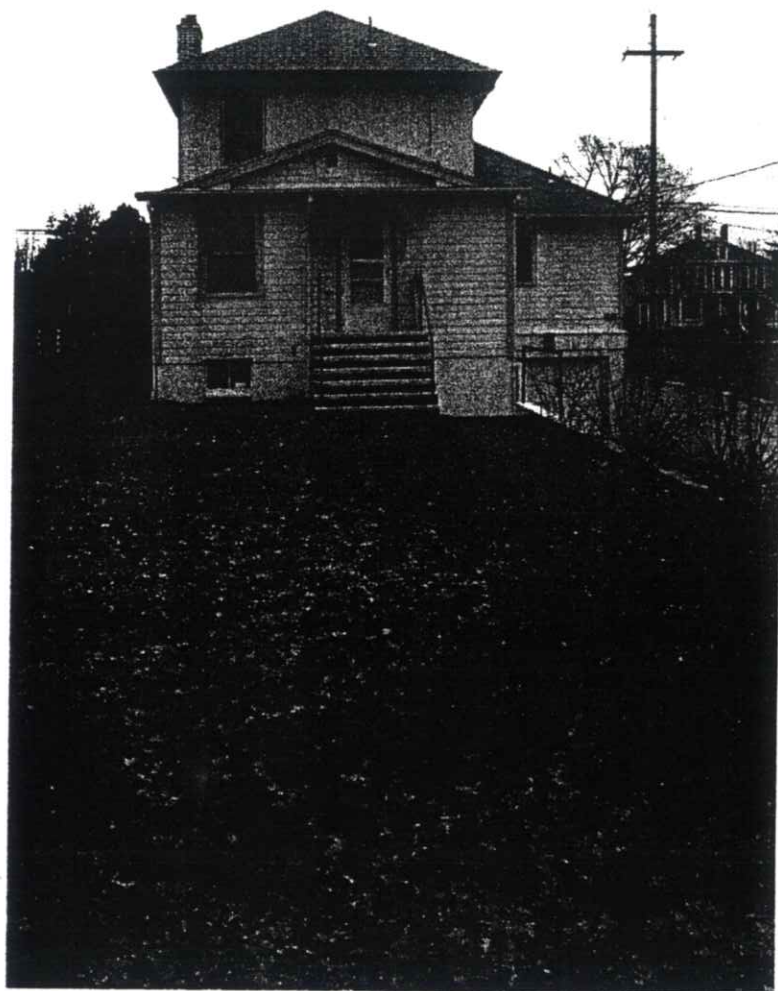


Figure 621-3 Rear elevation, faces south

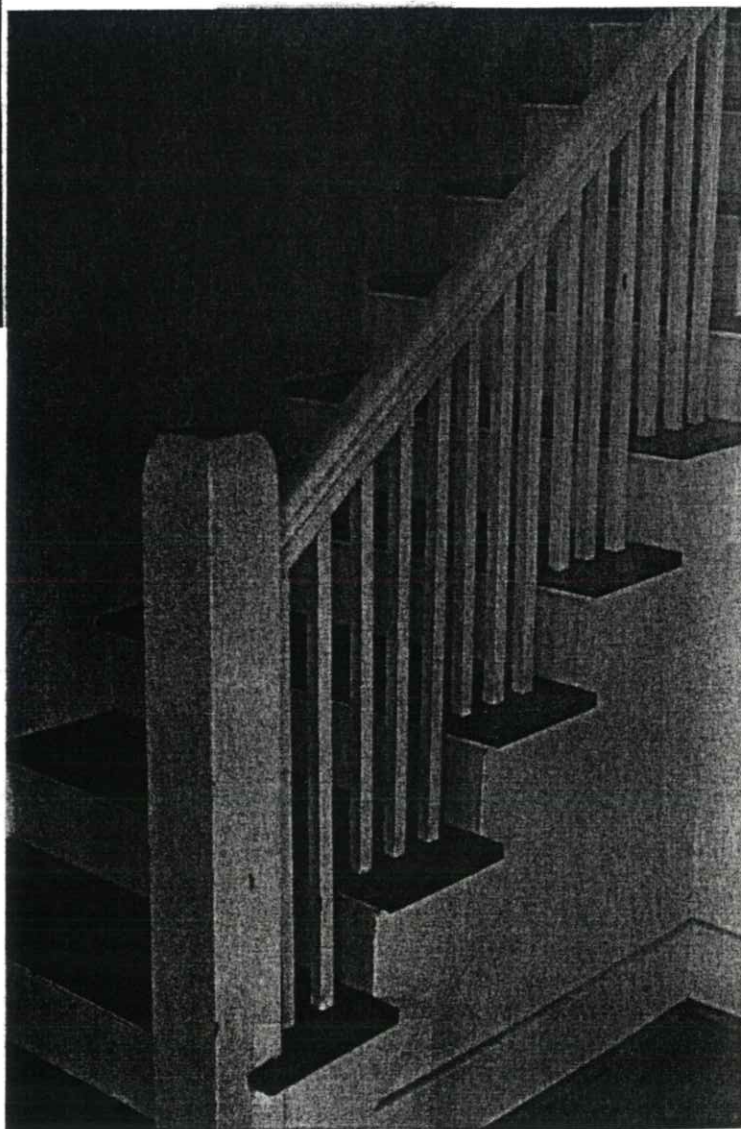
Figure 621-4 Side elevation, faces east



Figure 621-5 Detail, rafter tails on original portion (above) and on addition (below)



Figure 621-6 Interior, newel post and stair detail



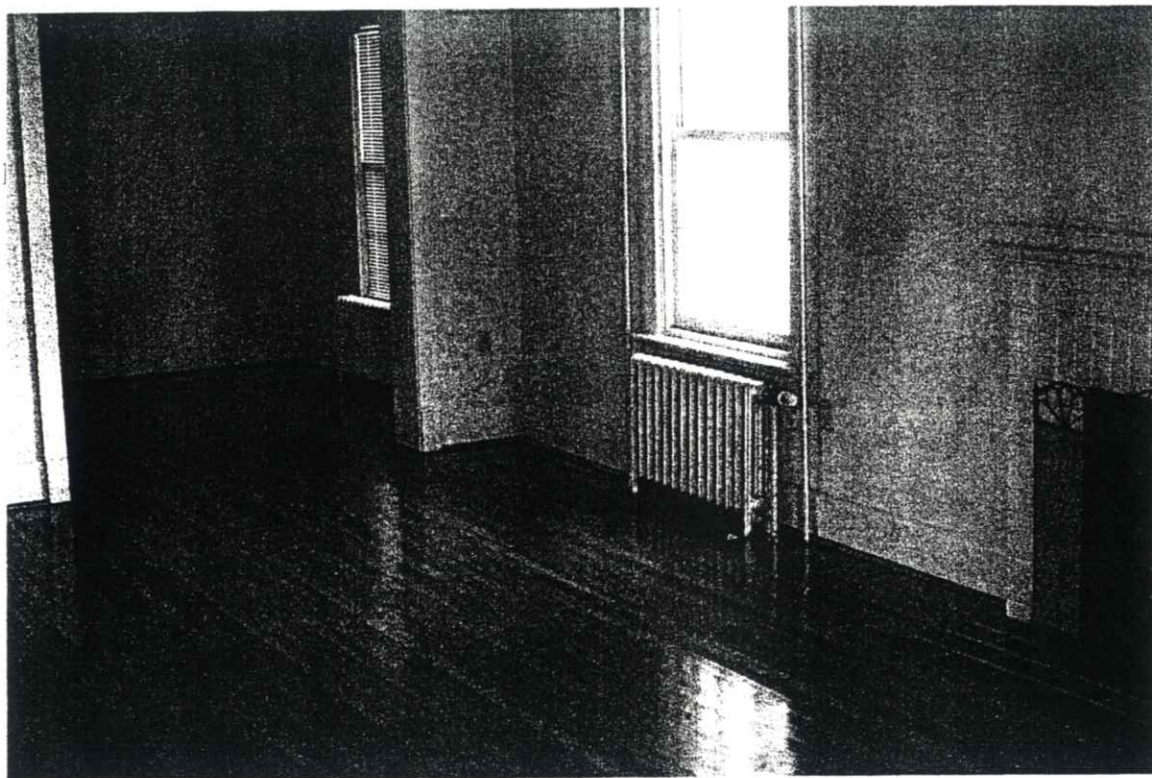
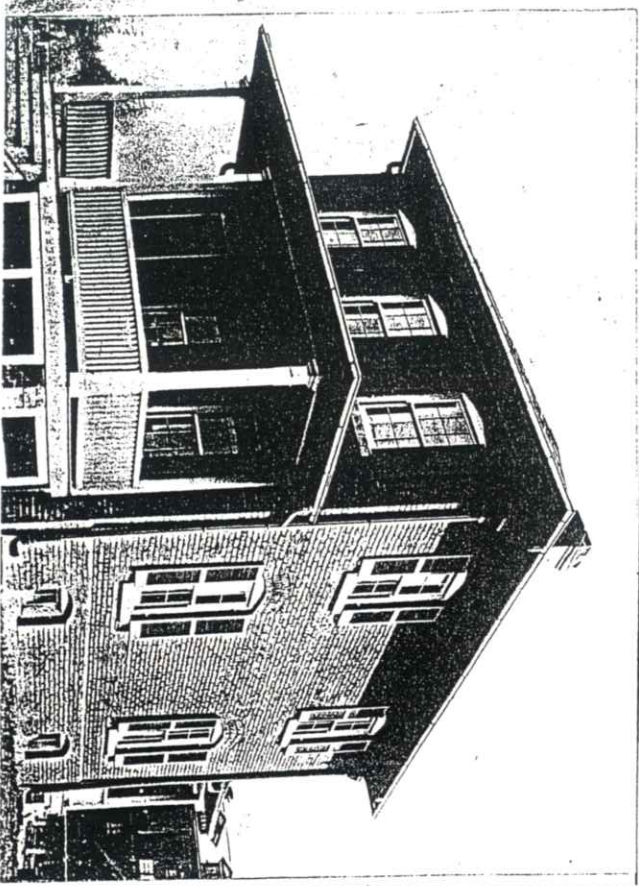


Figure 621-7 Interior, living
room, fireplace and
radiator

Reps	Expended to date	Year ending	3-1-15
Expended to date			
Yr. ending	3-1-06	"	3-1-16
	3-1-07	"	3-1-17
	3-1-08	"	3-1-18
	3-1-09	"	3-1-19
	3-1-10	"	3-1-20
	3-1-11	"	3-1-21
	3-1-12	"	3-1-22
	3-1-13	"	3-1-23
	3-1-14	"	3-1-24
	3-1-15	"	3-1-25
	3-1-16	"	3-1-26
	3-1-17	"	3-1-27
	3-1-18	"	3-1-28
	3-1-19	"	3-1-29
	3-1-20	"	3-1-30
	3-1-21	"	3-1-31
	3-1-22	"	
	3-1-23	"	
	3-1-24	"	
	3-1-25	"	
	3-1-26	"	
	3-1-27	"	
	3-1-28	"	
	3-1-29	"	
	3-1-30	"	
	3-1-31	"	
TOTAL			

6-30-18	5-1-18	\$..	163.06
6-20-18	5-1-19	\$..	75.45
6-20-20	5-1-21	\$..	173.50
6-20-20	5-1-21	\$..	173.50
6-20-20	5-1-21	\$..	73.83
6-20-20	5-1-21	\$..	36.47



Place. Vancouver, Barracks, Wash. March 1st, 1908.
* *Hospital Steward, Quarters.*

Building,.....
H.C. Gergets Ars.

1 N. C. S. O., Construction: Cost \$4,560.65 Date... 1907

Material: Brick Brick
Walls..... Foundations.....

Roof.....Slate
Floors.....Wood
How heated.....

Stoves (..sq ft. rad.), How lighted. Electricity

Provided with: Water connections..... Yes
Sewer connections.....

Yes, Water Closets No 1 Urinals No 0 Wash Sinks

No. 1 Wash Basins No. 1 Laundry Tubs No. 0 Bathe-Showers

No	Tubs	Screens	Storm	Coat	
0	1	0	0	0	

```

.....; screens.....; Storm
0      0      0      0      0
Dears

```

DOORS....., wall lockers No....., Total floor area above

basement sq. ft.; Dimensions, Main Building

..... Wings....., Each & every

Room arranged by floors;
basement:- 1r, 18'3"x28'3"

2nd Floor:- 2r, 12'x12' with L 6'6"x8' 1r, 6'x13'

$$1r, 6'x8' \quad 1r, 6'x10' \quad 1r, 6'x7'6''$$
[illegible]

below even can biologically all modifications, additions, introduction of water, sewer, electric light, etc., since

Mch. 1st, 1905.
1010: 2 installed: 1

1913, Oct. 15, - 15 sun-dew shades - \$15.00.

1932 *distal* / *See Range* → *Bar*

1932 7 1 Helen Keller ^{file}
 Oct 1934 Reimagine changed to 'Hospital & Boarding Quarter' NY #21 44. In file v-7-34. can 911

4/21/07 Interest Paid Taxes \$58.40

4-20-37	Repair to chimney	\$ 21.00 (P.O.1019)
5-20-37	Paint to 11th & 12th floors - 11 years in	

Each Pack - Overhead bathroom plumbing (Postpaid - P.O. 722) 359.

Figure 621-8 QMO Form 173A

Vancouver Barracks, Washington.

Designation of building Hospital Stewards Quarters

Capacity 1 Family

1907.

Date completed

Material: Walls Brick

Brick

Foundation

Wood

Floor area above basement, square feet

Floors

Wood

Main building 20'0" x 28'0"

1271

Basement 18'3" x 28'3"

Individual Heating Plant

(How heated)

Height of first floor above ground 2 feet 6 inches

Hot Air - "Excelsior" #20 Hot Air Furnace

(Type of heat)

How lighted Electricity

Water connections Yes

Sewer connections Yes

Gas connections No

METERS INSTALLED

(Give quantity and capacity)

Gas 73667

Electric 1 100V, 5A, 1ph.

XOD #8223877-Test.

XXXX 125065 Duncan.

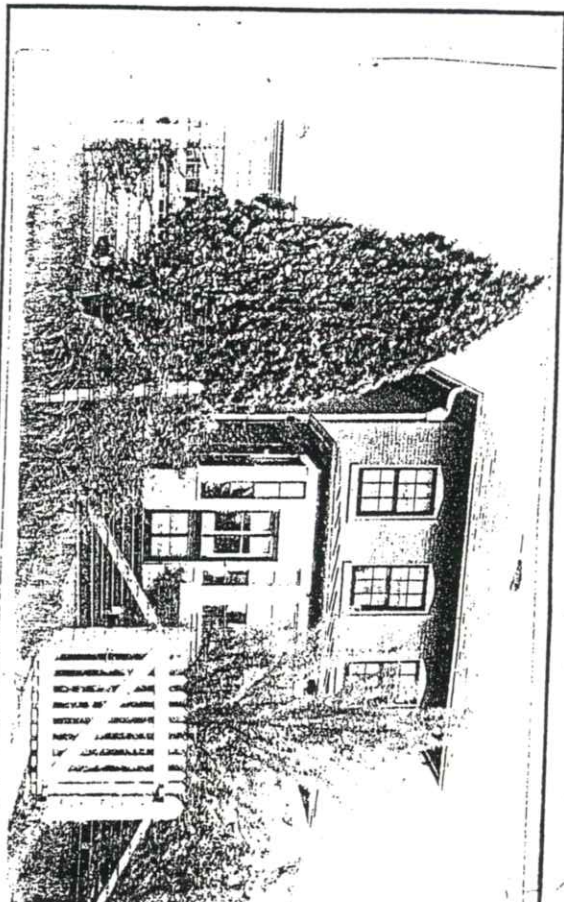
XXXX 254402 2401, 1ph.

ADDITIONS AND INSTALLATIONS

(Below enter chronologically all modifications, additions, introductions of water, sewer, lights, heating, etc.)

4560 = (890 sq. ft.) = \$5,125.00

On Post Oct 63 JT



ABRAM COX Hot Water Boiler, 40 gal. Tank
(Type of domestic hot water heater)

WORKING RANGES INSTALLED
(Give quantity and size)

Refrigerators installed
(Give quantity and size)

Gas
Electric
Ice

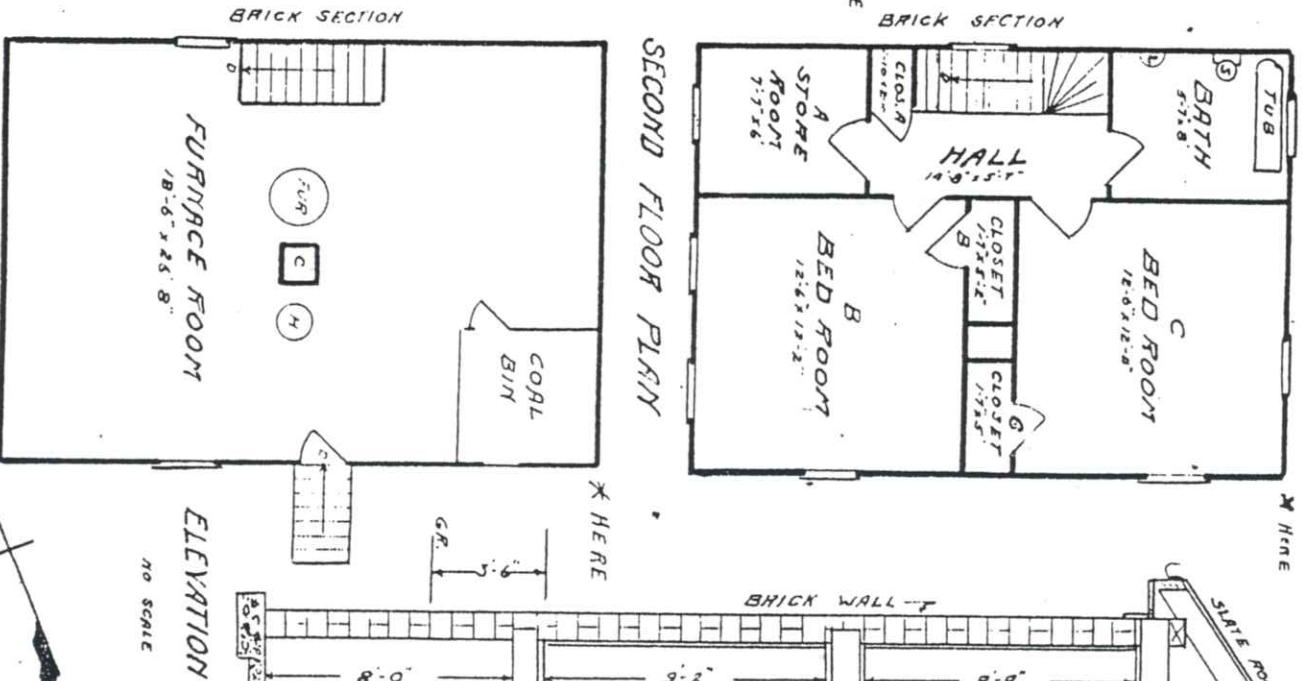
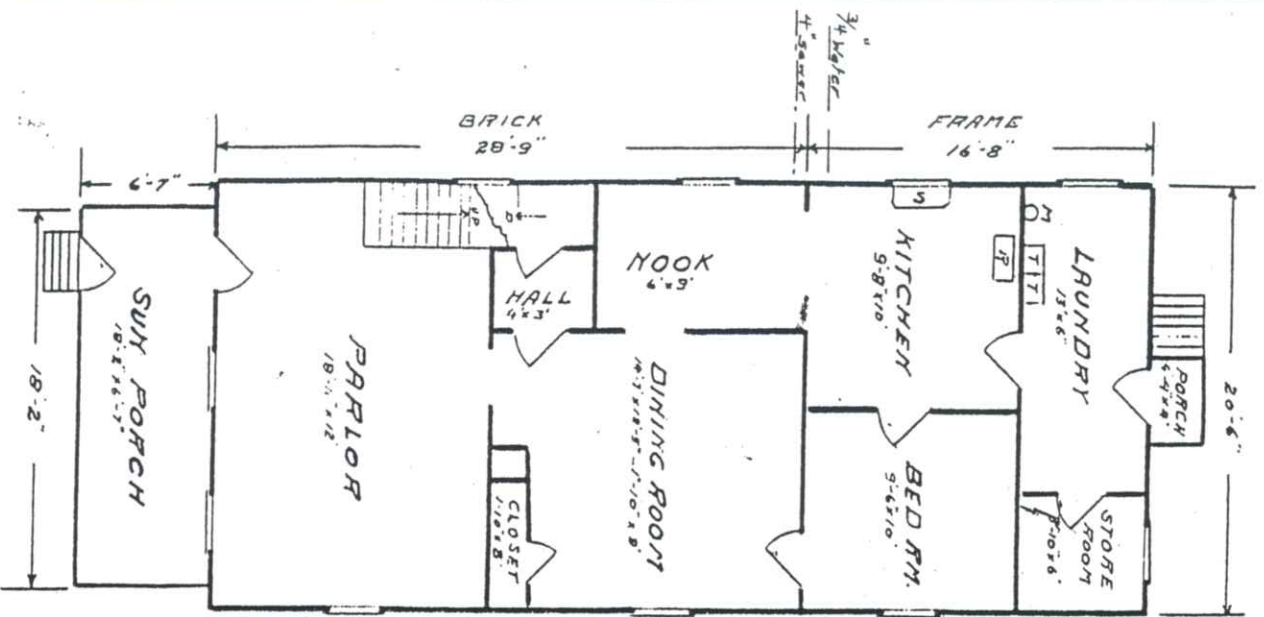
Gas connections
Electric 1 100V, 5A, 1ph.
XOD #8223877-Test.
XXXX 125065 Duncan.
XXXX 254402 2401, 1ph.

DATE	DESCRIPTION	COST	DATE	COST
Mar 31/37	Interior repainted, cost of material	\$ 58.40		
Apr 20/37	Miscellaneous general repairs (Contracts P.O. 782 & P.O. 1099), total cost	\$380.00		
-30-40	Paint	198.60		
-5-40	Install gas range	54.24		
-9-40	Install gas water heater	49.90		
-2-41	Work on paint	16.64		

Figure 621-9 QMO Form 117

INSTRUCTIONS—"a" State whether heated from central heating or by individual heating plants, stoves, furnaces, or fireplaces.
"b" State whether steam, vapor, hot water, or hot air.
"c" State whether gas, coal, oil, or central heating plant.
Reverse side of form.

HISTORICAL RECORD VANCOUVER BARRACKS WASH. HOSPITAL STEWARDS QUARTERS NO. - (128) 621



BASEMENT

ELEVATION

NO SCALE

Areas		
FIRST FLOOR		Sq. Ft.
PARLOR	18-11 x 12	226
STAIRWAY	3 x 4	12
DINING RM.	11-10 x 8	146
CLOSET	11-0 x 8	15
HALL	3 x 4	12
KITCHEN	9-8 x 10	97
BED RM.	10 x 9-6	95
LAUNDRY	6 x 13	78
STORE RM.	6 x 5-10	34
TOTAL		790
SECOND FLOOR		
BED RM. A	12-6 x 12-2	152
C	18-6 x 18-4	154
CLOSET A	2-10 x 1-10	5
B	1-7 x 5-8	8
C	1-7 x 5	8
HALL	14-8 x 5-7	82
BATH RM.	5-7 x 8	45
TOTAL		499
BASEMENT		
FURNACE RM.	10-6 x 26-0	493
FRONT PORCH	18-2 x 6-7	119
BACK	4-9 x 4	17
TOTAL		136
TOTAL		1918

EQUIPMENT
1-3 P. BATH SET
1-ELEC. METER
1-1" WASH. RANGE
2-LAUNDRY TRAYS
1-SINK
EXCELSIOR STEEL CO. FUR 19-18
1-BEHRM COX CO. H.W.H.

OFFICE OF THE QUARTERMASTER
VANCOUVER BARRACKS, WASH.

Scale 1/8" = 1 ft. Date Aug. 1937

Drawn By A. H. Shumway

Submitted By J. H. B. D. 1937

APPROVED FOR THE COMMANDING GENERAL

MAJOR 74th INF. ABN.

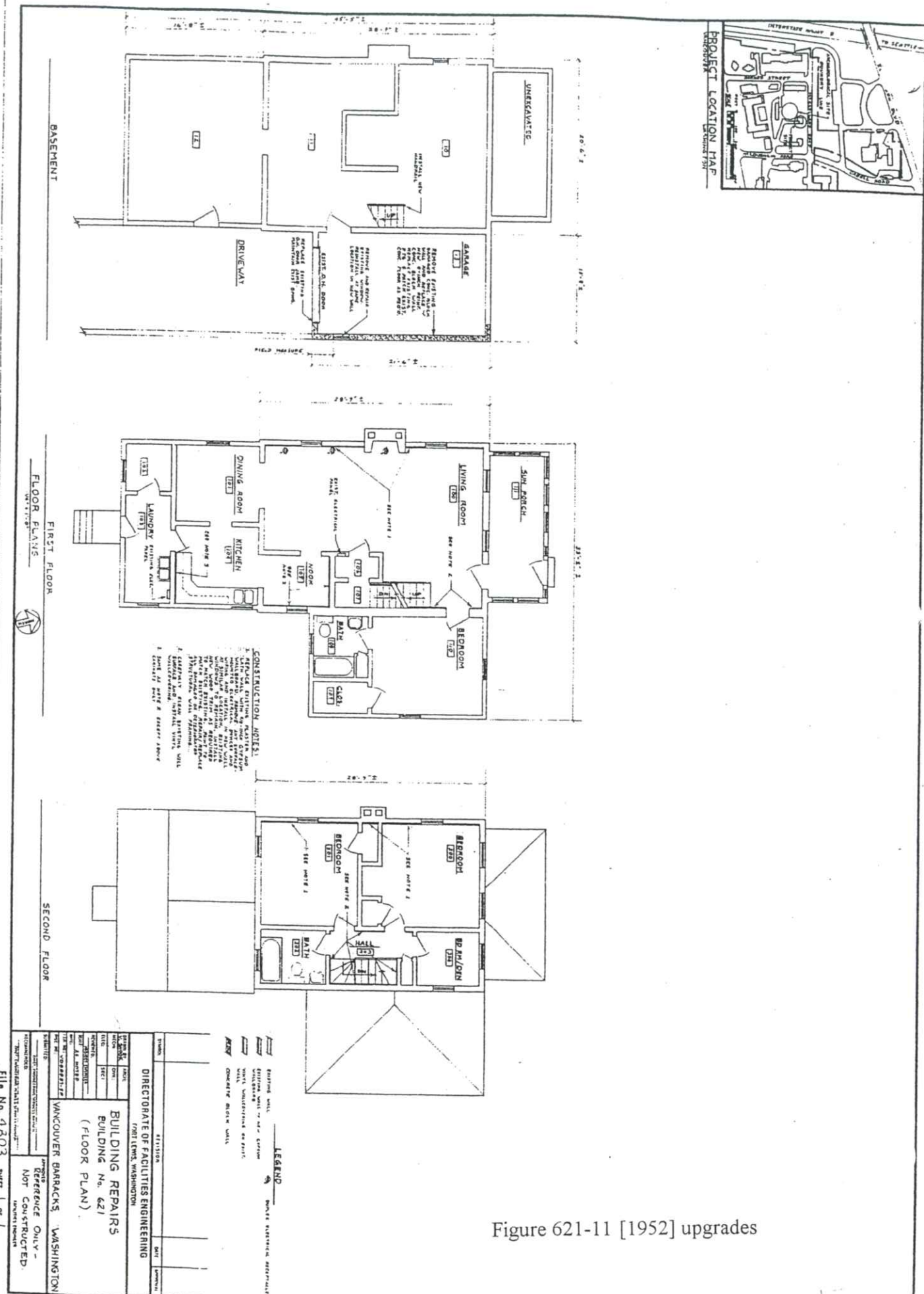
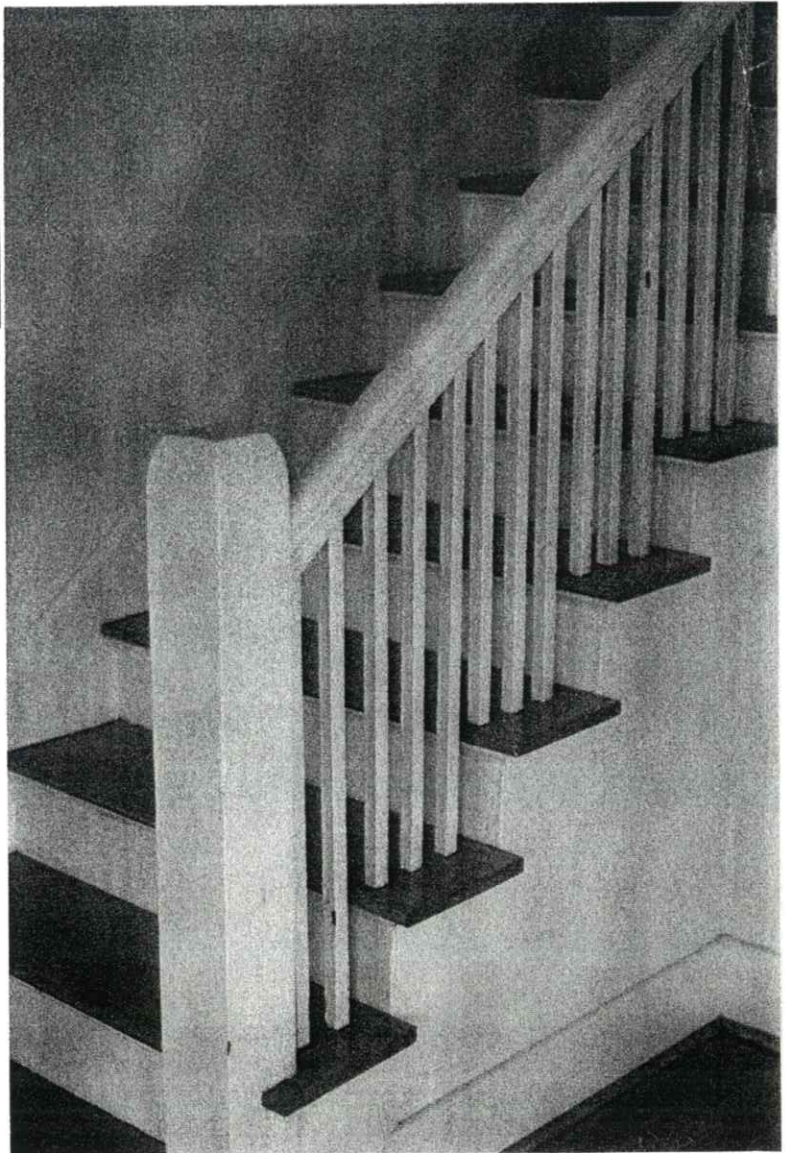


Figure 621-11 [1952] upgrades

Figure 621-5 Detail, rafter tails on original portion (above) and on addition (below)



Figure 621-6 Interior, newel post and stair detail



WEST BARRACKS PHYSICAL INVENTORY REPORT

BUILDING INVENTORY

BUILDING NUMBER: **Building 626**

NAME: Current name: Dental Surgery
Historic name: Dental Surgeon's Office
Dental Clinic

PLAN TYPE: Single-story, rectangular wood-frame utility building with minimum exterior detailing

PREVIOUS BUILDING NUMBERS: Building 137

QUARTERMASTER PLAN NUMBER: Not listed on QMC Form 117. The history of this building suggests that no standard plans were followed

BUILDING CHRONOLOGY:

1910 Building 137, the Dental Surgeon's Office, is created from an older building variously reported as the dead house, and as the hospital tool shed, which is moved onto the current site across from the Post Hospital. Cost is \$186.69. Dimensions of main building (dead house) are 13' x 26' and dimensions of a wing to the rear (north) are 12' x 12'. This wing may have been a separate structure added to the main structure. Total square footage reported on Form 173A is 265.

1912 Maintenance costs \$4.63

1913 Maintenance costs \$1.00

1914 Maintenance costs \$197.25
Repairs under contract

1915 Maintenance costs \$0.50

1916 Maintenance costs \$1.25
Addition made \$267.01

1917	Maintenance costs	\$3.00
1918	Maintenance costs	\$3.00
1919	Maintenance costs	\$45.00
	Addition to north wing, 10' x 20' , for operating room, toilet, and work room.	
1920	Maintenance costs	\$30.00
1921	Maintenance costs	\$218.65
1922	Maintenance costs	\$61.20
1924	Maintenance costs	\$23.47
1925	Maintenance costs	\$14.36
1935	Name changed by General Order 11, from "Dental Surgeon's Office," to "Dental Clinic"	
1936	Exterior repaint	\$144.08
1939	Purchase pump and receiver Remove electric meter Install 3 ceiling fixtures Install new electric panel Remove steam heater	
1940	Install electric meter Install Venetian blinds	
1941	Electrical work Rebuild air compressor and condensate pump Install 2 dental chairs Install electric water heater	
1952	Extensive renovation of the building changes footprint and roof line, brings total square feet up to 1381.	

SIGNIFICANT FEATURES

EXTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Rectangular footprint, horizontal massing
- Gable roof
- Horizontal siding
- 1-over-1, 4-over-4, and 8-over-8 double hung windows
- Window trim
- Inset porch
- Panel door with single light
- Hipped roof porch overhang
- wooden louvered ventilators
- 5-panel entry door
- Railing on porch

EXTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Roofing material
- Exterior lighting and wiring
- Foundation skirting
- Blocked widow on south

INTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Window and door trim where original
- Paneling where original

INTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Partition walls
- New interior doors
- Bathroom
- Floor materials
- Replacement window trim

OVERALL INTEGRITY

Building 626 retains good integrity on the exterior as a 1952 building. There is no sign of the 1910 building, which was incorporated into the new structure.

DATE OF SITE VISIT 6/7/02

SOURCES

Erigero, Patricia C., "Draft Historic Overview and Evaluation of Significant Resources of Vancouver Barracks, Fort Vancouver, Providence Academy, Kaiser Shipyards." Seattle: National Park Service, 1992.

Erigero, Patricia C., and Terri A. Taylor. Cultural Landscape Report: Fort Vancouver National Historic Site 2 vols. Seattle: National Park Service, 1992.

Gressinger, Walter, Architects. *Maintenance and Repair Manual for Historic Structures, Vancouver Barracks, Washington*. Seattle: Seattle District, US Army Corps of Engineers, n.d.

National Archives, Record Group 77, Entry 391, "Construction Completion Reports, Vancouver Barracks Washington."

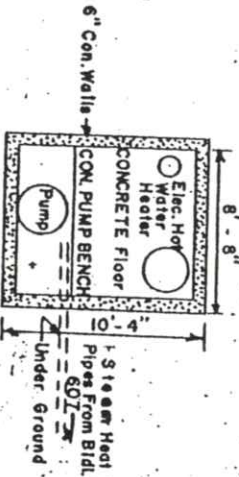
National Archives, Record Group 92, Entry 217074, Box 4944; "List of All Post Buildings at Vancouver Barracks built on or before January 15, 1909."

Quartermaster General Form 173A series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 117 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 515/111 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Van Arsdol, Ted. *Northwest Bastion: The US Army Barracks at Vancouver. 1849 -1916* Vancouver: Heritage Trust, 1991.



ELEVATION THRU SEC. UTILITY PIT UNDER TOILET
OF UTILITY: RNT ROOM
NO. SCALE NO. SCALE
+ Sewer Outlet

plans

SUBMITTED BY OTTO MILLER ENGR. GEN.

WEST BARRACKS PHYSICAL INVENTORY REPORT

BUILDING INVENTORY

BUILDING NUMBER: **Building 628**

NAME: Current name: Mess Hall with kitchen

PLAN TYPE: Single-story, rectangular wood-frame utility building with minimum exterior detailing

PREVIOUS BUILDING NUMBERS: Building 167

QUARTERMASTER PLAN NUMBER: Not listed on QMC Form 117, probable source is the Quartermaster Plan 93 series Mess Hall

BUILDING CHRONOLOGY:

1914 Buildings 166 and 167 (now 630 and 628) were completed July 28, 1914. Total cost of building 630 was \$2,037.46.

1930 Form 111 (Record of Condition and Equipment of Buildings) lists building 628 as a Mess House equipped with one coal range, one range boiler, one refrigerator, and one kitchen sink.

1939 Install gas hot water heater

1937 Plans filed in this year show building with mess hall, two store rooms, kitchen, and pantry

1940 Install faucet, window screens

1949 Original wood shingle roof replaced with composition

1980 Plans filed in this year show a major renovation. All kitchen equipment is replaced with stainless steel commercial equipment including freezers, steam table, ranges, ovens, fryers, sinks, vents, and dishwashers. New floor plan included enlisted men's mess, officers' mess, bathroom, hallway, new entrances on west.

SIGNIFICANT FEATURES

EXTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Rectangular footprint, horizontal massing
- Gable roof
- Simple cornices and frieze boards
- Horizontal siding and plain corner boards
- Double-hung windows 2/2
- Window trim with simple pedimented cap
- Transom over east door

EXTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Roofing material
- Exterior lighting and wiring
- New entries
- Replacement doors on north side
- Roof vent for kitchen

INTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Window and door trim where original
- Paneling where original

INTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Partition walls
- Ceiling, lighting
- New Interior doors
- Bathroom
- Kitchen and equipment
- Floor materials
- Replacement window trim

OVERALL INTEGRITY

Building 628 retains good integrity on the exterior with the exception of the new entries on the north, the new doors, exterior lighting, and railings. The interior has been completely changed in layout and contents. Figure 30, which is the interior detail sheet for QM Plan 93, identifies some elements of original interior detailing.

DATE OF SITE VISIT 6/7/02

SOURCES

Erigero, Patricia C., "Draft Historic Overview and Evaluation of Significant Resources of Vancouver Barracks, Fort Vancouver, Providence Academy, Kaiser Shipyards." Seattle: National Park Service, 1992.

Erigero, Patricia C., and Terri A. Taylor. Cultural Landscape Report: Fort Vancouver National Historic Site 2 vols. Seattle: National Park Service, 1992.

Gressinger, Walter, Architects. *Maintenance and Repair Manual for Historic Structures, Vancouver Barracks, Washington*. Seattle: Seattle District, US Army Corps of Engineers, n.d.

National Archives, Record Group 77, Entry 391, "Construction Completion Reports, Vancouver Barracks Washington."

National Archives, Record Group 92, Entry 217074, Box 4944; "List of All Post Buildings at Vancouver Barracks built on or before January 15, 1909."

Quartermaster General Form 173A series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 117 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 515/111 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Van Arsdol, Ted. *Northwest Bastion: The US Army Barracks at Vancouver. 1849 -1916* Vancouver: Heritage Trust, 1991.

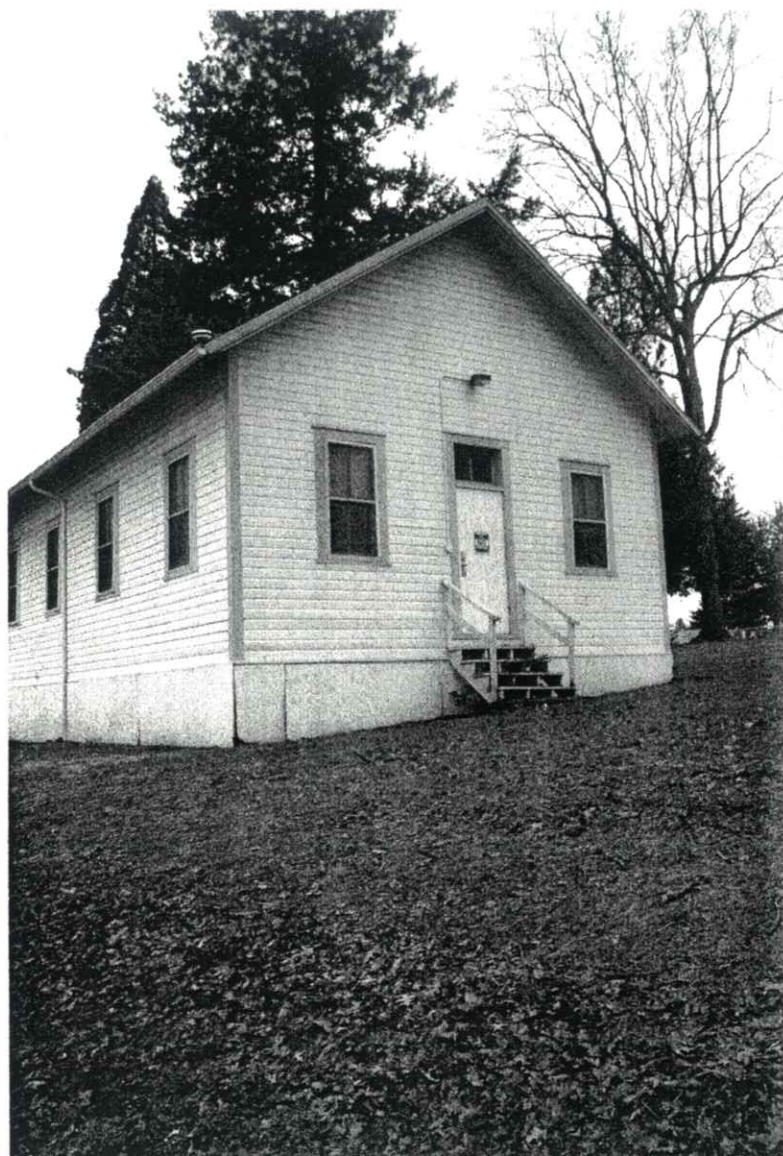


Figure 628-1 Elevation faces east



Figure 628-2 Elevation faces south

Figure 628-3 Elevation faces east

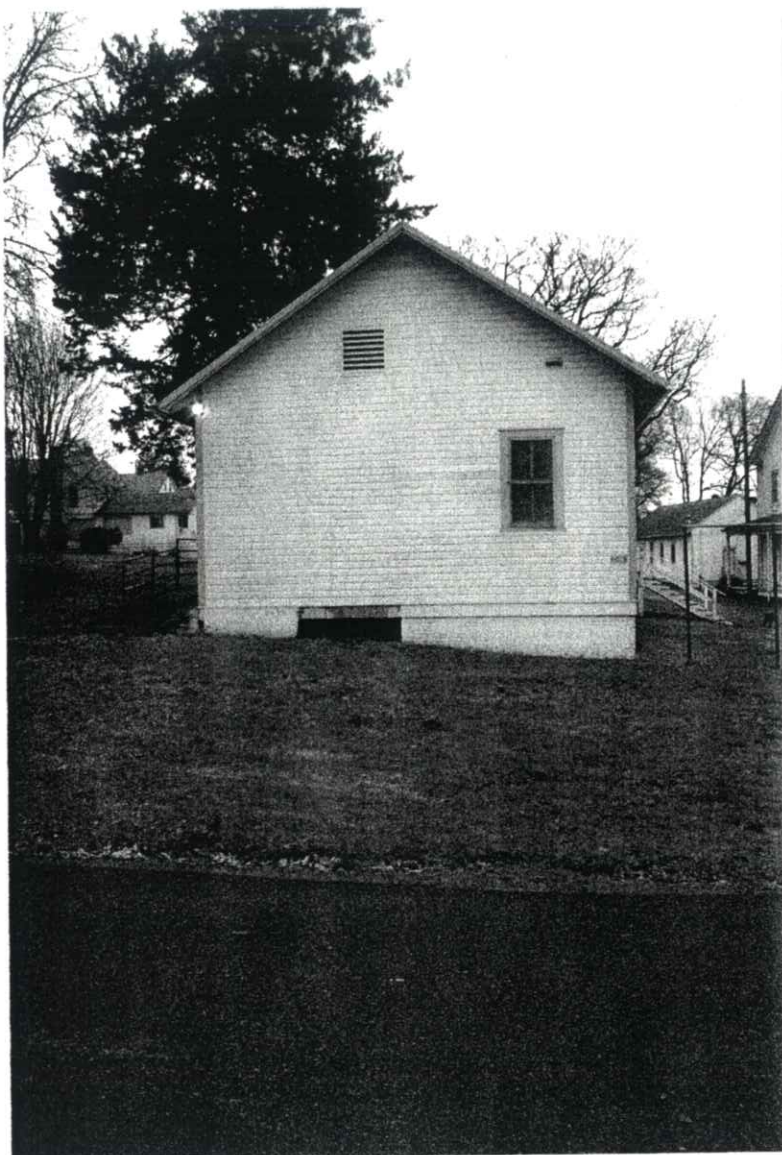


Figure 628-4 Elevation faces north

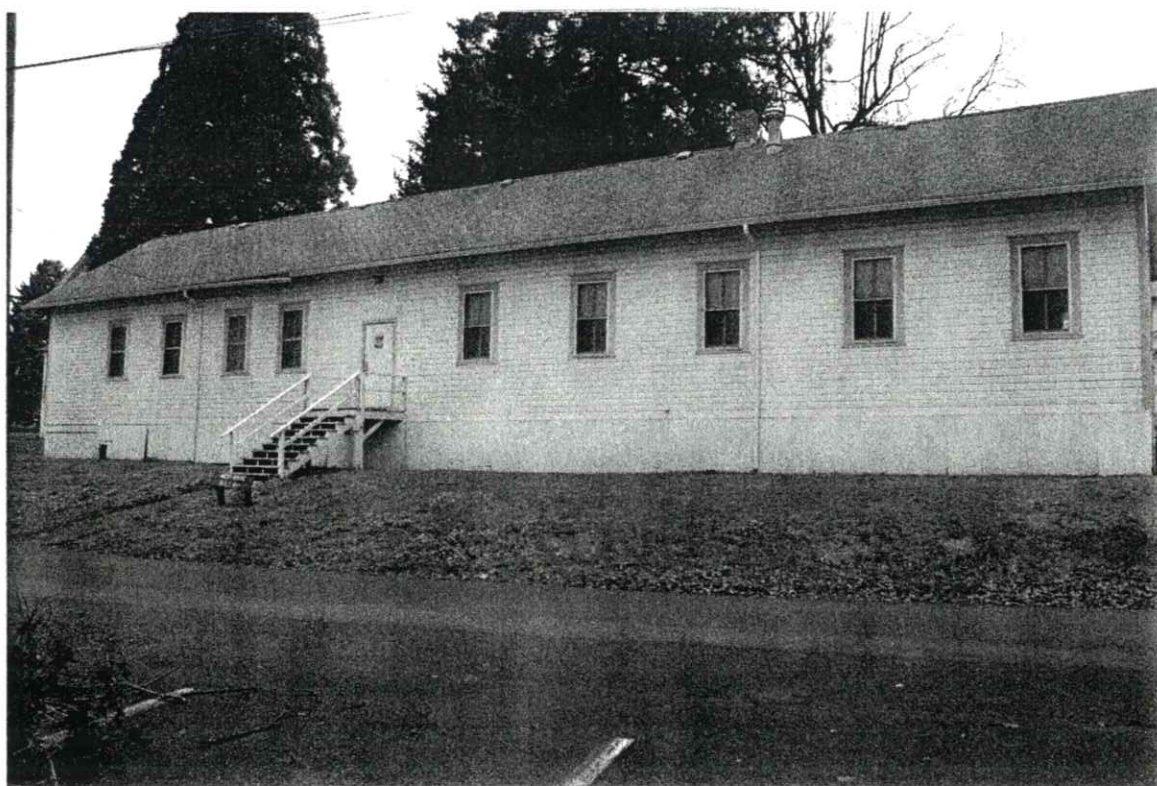
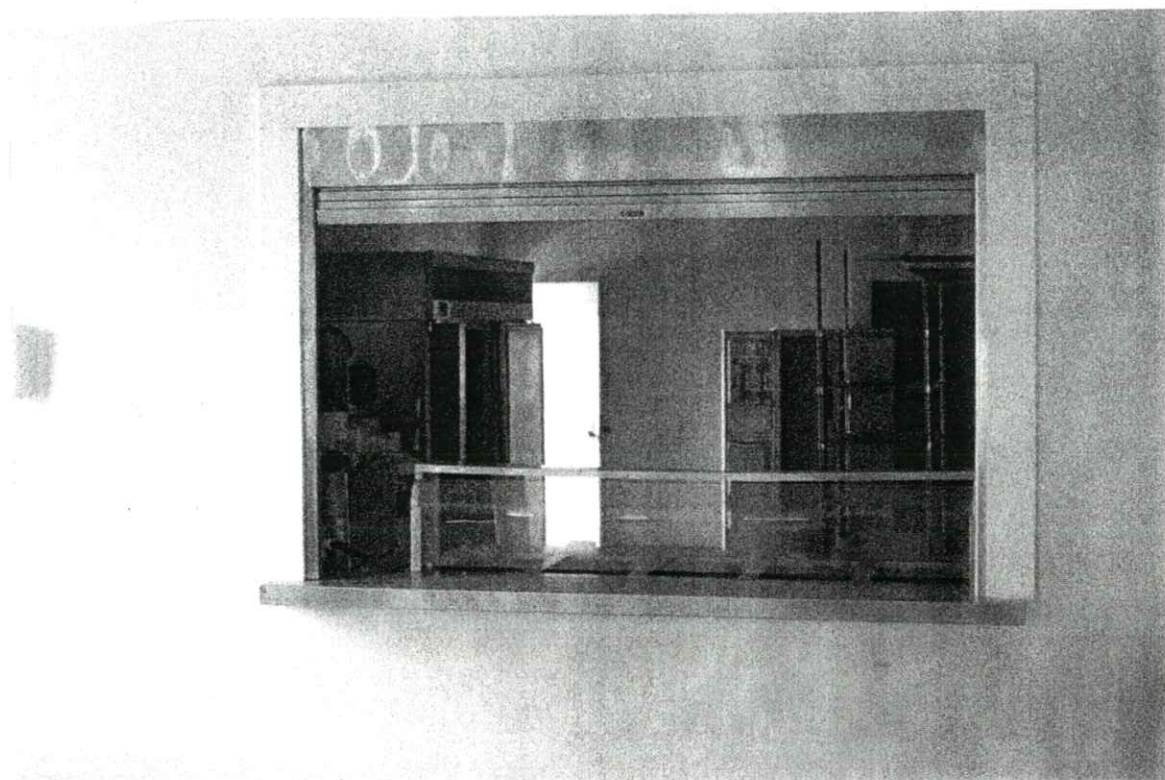




Figure 628-5 Interior of Mess Hall, facing east

Figure 628-6 Service window



Vancouver Barracks, Washington

Mess House

Location of building
Cost, \$ 2910.66
Date completed July 28 1914. Capacity 1 Inf. Co. 140 men

Foundation Wood
Composition shingles
Flood Walls
Floors Foundation
Wood

1 floor area above basement, square feet 2513
Main building 1001 x 2613 ft
inside measurements
Wings

Individual heating stoves
Basement
Height of first floor above ground 3 ft

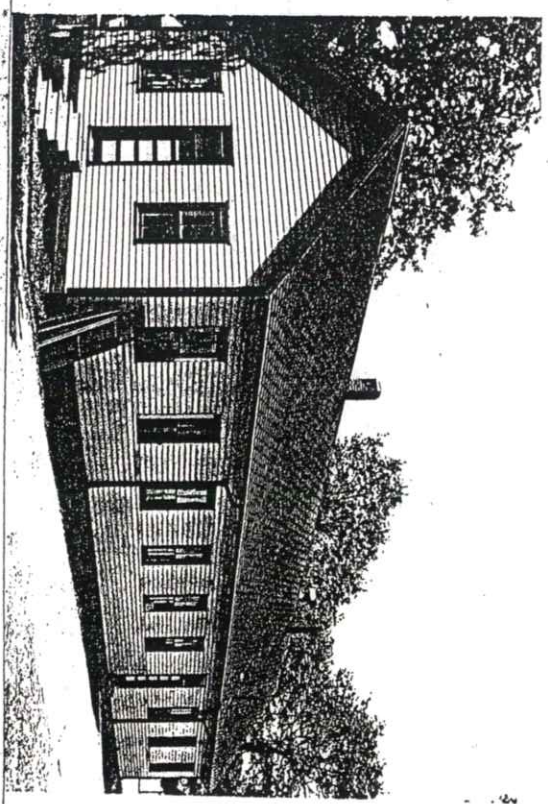
Hot air
How lighted Electricity
Water connections Yes
Sewer connections Yes
Gas connections None

Coal: Water heated by cooling range
(Type of domestic hot water heater)
Cooking Ranges Installed
Meters Installed

Gas, No. One #3316352 /
Electric, No. ---
Oil, No. ---
Steam, No. ---
Water, No. ---

ADDITIONS AND INSTALLATIONS

(Below enter chronologically all modifications, additions, introductions of water, sewer, lights, heating, etc.)



Post Plan No. ---
O.Q.M.C.: Plan No. ---
Building No. 167

On Post Oct 16

DATE	DESCRIPTION	COST	DATE	COST
12-21-17	1 EA Heater 605 Horizontal, Radd 125 1/2 1170	1170		
7-15-18	2 EA Ranges	180		
10-17-18	1 EA Ranges	165		
June 1919	Roofed - Compacting 500.00	500.00		
12-21-17	1 EA Heater 605 Horizontal, Radd 125 1/2 1170	1170		
7-15-18	2 EA Ranges	180		
10-17-18	1 EA Ranges	165		
June 1919	Roofed - Compacting 500.00	500.00		

Figure 628-7 QMO Form 117

HISTORICAL RECORD VANCOUVER BARRACKS WASH MESS HALL BLDG. 157

SQUARE FOOTAGE

MESS HALL	26' x 27' 3"	17	2	7
KITCHEN	13' 1" x 11' 4"	14	7	2
STOVE RM	8' 1" x 12' 1"	9	7	2
PANTRY	9' 10" x 12' 3"	12	2	0
TOILET	5' 0" x 5' 3"	2	5	1
WATER LINE	10' 0"			
NO. SINK				
CASE HOT WATER BOILER				
" METEN ELECTRIC				
PLASTERED WALLS				
ONE TSE BOX				

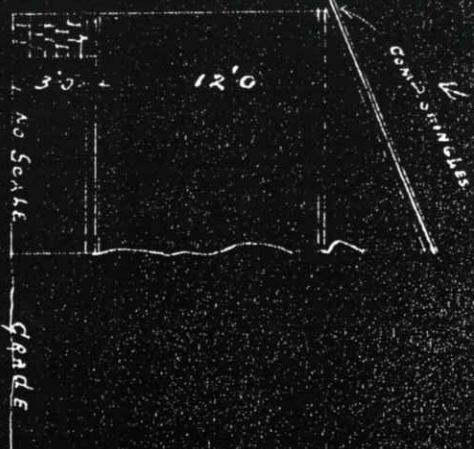
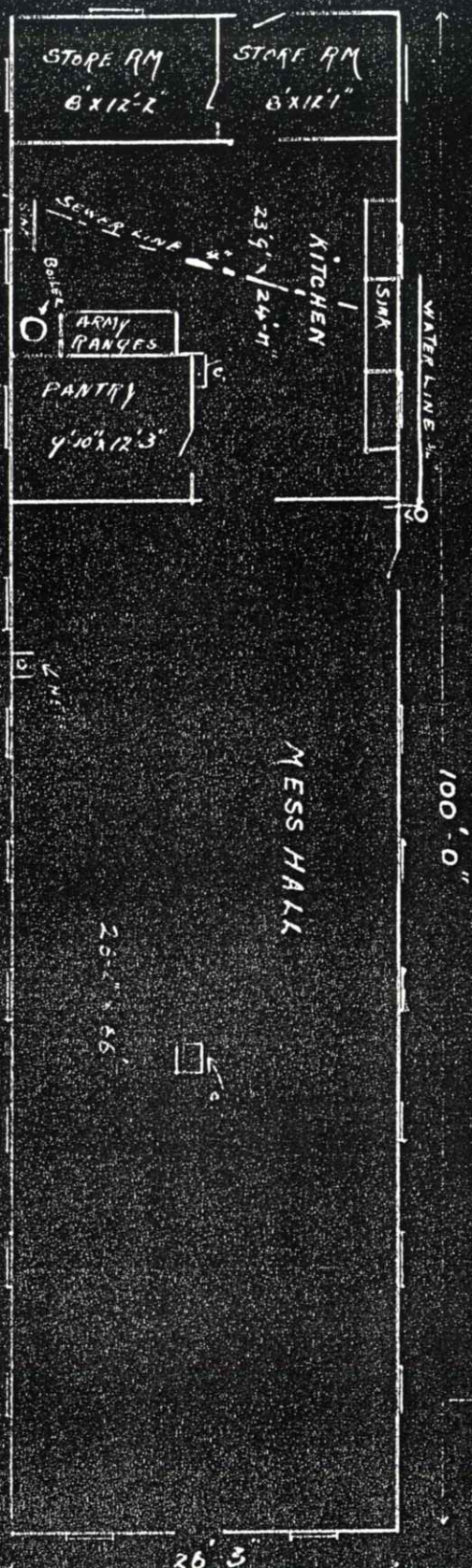


Figure 628-8 Floor plan, 1937
inventory

OFFICE OF THE QUARTERMASTER
VANCOUVER BARRACKS, WASH.

Scale 3/32" = 1' Date FEBRUARY 1937

Drawn by *Charles J. Dwyer*

Submitted by *Charles J. Dwyer*

Approved by *W. H. Dwyer*

RECEIVED 1937

[illegible][illegible]

Diagram of a storage unit. The unit has a window on the left side and a door on the right side. The door is labeled "DOOR" and has a handle. The window is labeled "WINDOW" and has a frame. The unit is labeled "STORAGE UNIT" at the bottom.

THE

628
VANCLOVER BATHROOMS
VANCLOVER

DATE	ATTACHED	NO. OF PAGES	NO. OF PAGES
12/20/01	1	2	2

NOTARIZED 16 DEC 03 CONTRACT PACA07-03-C-0018 AS BULK

DATE	ATTACHED	NO. OF PAGES	NO. OF PAGES
12/20/01	1	2	2

NOTARIZED 16 DEC 03 CONTRACT PACA07-03-C-0018 AS BULK

WEST BARRACKS PHYSICAL INVENTORY REPORT

BUILDING INVENTORY

BUILDING NUMBER: **Building 630**

NAME: Current name: Quartermaster Storehouse
Historic name: Mess Hall or Mess House

PLAN TYPE: Single-story, rectangular wood-frame utility building with minimum exterior detailing

PREVIOUS BUILDING NUMBERS: Building 166

QUARTERMASTER PLAN NUMBER: Not listed on QMC Form 117, probable source is the Quartermaster Plan 93 series Mess Hall

BUILDING CHRONOLOGY:

1914 Buildings 166 and 167 (now 630 and 628) were completed July 28, 1914. Total cost of building 630 was \$2,037.46.

1930 Form 111 (Record of Condition and Equipment of Buildings) lists building 630 as a Mess House equipped with one coal range, one range boiler, and one kitchen sink. There is no refrigerator in the building at this time.

1936 General Order #8, February 21, 1936 changes building from Mess House to Storehouse for Spruce Production Corporation records. This agency is the civilian successor to the Army's Spruce Production Division.

1936 Form 111 (filed June 30, 1936) lists building as storehouse with range, range boiler, and kitchen sink removed.

1941 Form 111 lists building as a Storehouse equipped with a gas range

1949 Original wood shingle roof replaced with composition

1953 Floor plans on file divide building into six rooms including one bathroom.

After
1953 Building divided into 10 rooms with hallway. Bathroom enlarged, kitchen installed.

After
1990 Fire in south west corner room; damage to ceilings and interior walls

SIGNIFICANT FEATURES

EXTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Rectangular footprint, horizontal massing
- Gable roof
- Simple cornices and frieze boards
- Horizontal siding and plain corner boards
- Double-hung windows 2/2
- Window trim with simple pedimented cap
- 5-panel entry door

EXTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Roofing material
- Exterior lighting and wiring
- Railing to west entry
- Replacement door and transom on north side
- Blocked widow on west

INTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Window and door trim where original
- Paneling where original

INTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Partition walls
- New interior doors
- Bathroom
- Kitchen
- Floor materials
- Replacement window trim

OVERALL INTEGRITY

Building 630 retains good integrity on the exterior with the exception of replacement entry doors, exterior lighting, and railings. The interior has been subjected to repeated re-modeling as the use of the building has changed from its original use as a Mess House, to its use after 1936 as a Storehouse, to its recent use as Quarters. Figure 30, which is the interior detail sheet for QM Plan 93 identifies some elements of original interior detailing.

DATE OF SITE VISIT 6/7/02

SOURCES

Erigerro, Patricia C., "Draft Historic Overview and Evaluation of Significant Resources of Vancouver Barracks, Fort Vancouver, Providence Academy, Kaiser Shipyards." Seattle: National Park Service, 1992.

Erigerro, Patricia C., and Terri A. Taylor. Cultural Landscape Report: Fort Vancouver National Historic Site 2 vols. Seattle: National Park Service, 1992.

Gressinger, Walter, Architects. *Maintenance and Repair Manual for Historic Structures, Vancouver Barracks, Washington*. Seattle: Seattle District, US Army Corps of Engineers, n.d.

National Archives, Record Group 77, Entry 391, "Construction Completion Reports, Vancouver Barracks Washington."

National Archives, Record Group 92, Entry 217074, Box 4944; "List of All Post Buildings at Vancouver Barracks built on or before January 15, 1909."

Quartermaster General Form 173A series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 117 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 515/111 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Van Arsdol, Ted. *Northwest Bastion: The US Army Barracks at Vancouver. 1849 -1916* Vancouver: Heritage Trust, 1991.



Figure 630-3 Rear elevation, faces west

Figure 630-4 Side elevation, faces north



Figure 630-5 Interior, showing lockers and interior door

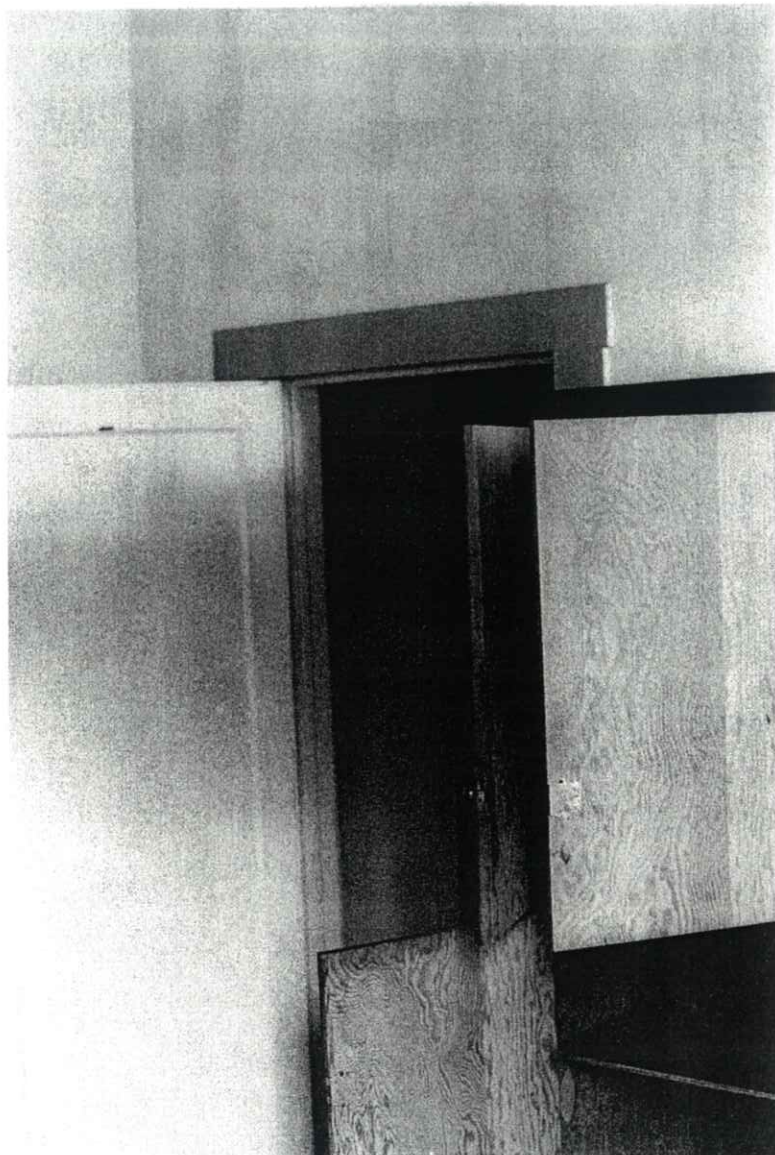
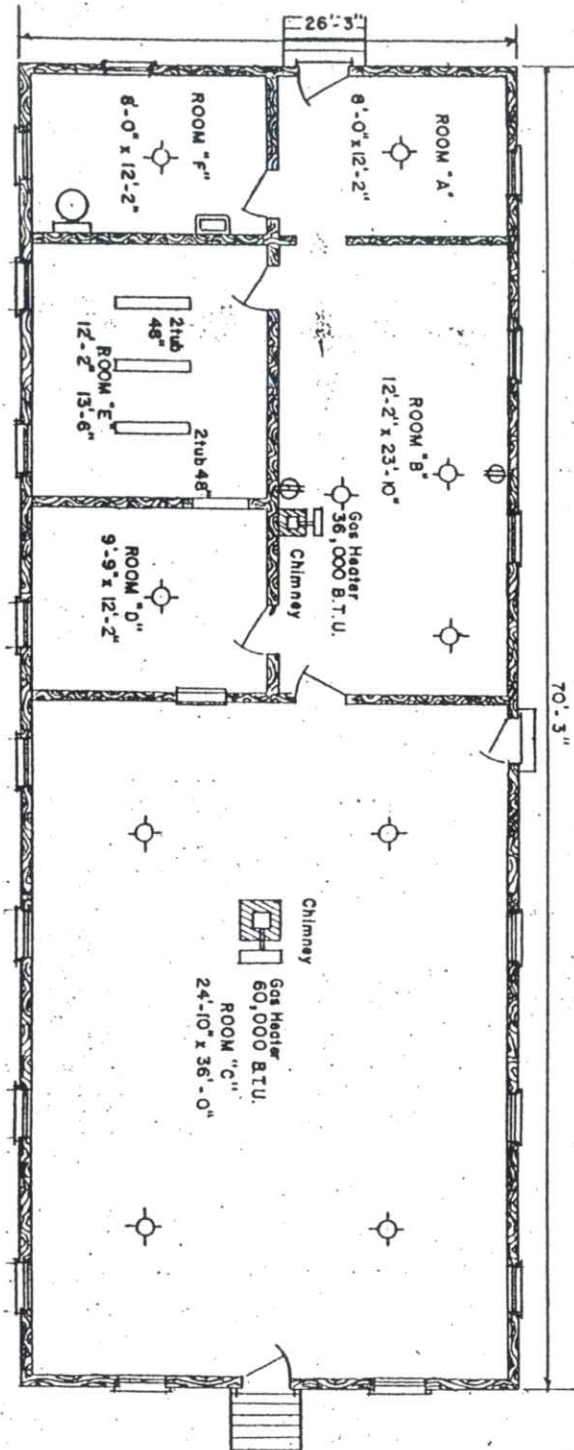


Figure 630-6 Interior, showing fire damage



HISTORICAL RECORD VANCOUVER BARRACKS WASHINGTON BLDG. NO. 630

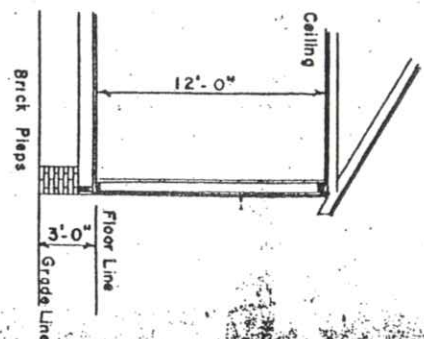


FLOOR PLAN
SCALE 1/8" = 1'-0"

ROOMS	SIZES	SQ. FT.
ROOM A	8'-0" x 12'-2"	97'-0"
ROOM B	12'-2" x 23'-10"	280'-0"
ROOM C	24'-10" x 36'-0"	894'-0"
ROOM D	9'-9" x 12'-2"	118'-0"
ROOM E	12'-2" x 13'-6"	163'-0"
ROOM F	8'-0" x 12'-2"	97'-0"
TOTAL		1649'-0"

Figure 630-8 Floor plan, 1953

ELEVATION
SCALE 1/8" = 1'-0"



OFFICE OF THE POST ENGINEER
VANCOUVER BARRACKS WN.

DRAWN BY: [Signature]
CHECKED BY: [Signature]
SCALE: 1/8" = 1'-0"
APPROVED BY: [Signature]
DATE: 1953
SHEET 1 OF 1

WEST BARRACKS PHYSICAL HISTORY REPORT

BUILDING INVENTORY

BUILDING NUMBER: **Building 631**

NAME: Hospital Steward's Quarters

PLAN TYPE: One and a half-story frame residence with gable roof, single story frame addition on rear (south) and story and half addition on east side.

PREVIOUS BUILDING NUMBERS: Building 82

QUARTERMASTER PLAN NUMBER: Not listed on QMC Form 117, probable source is the Quartermaster Plan 87 series, especially 87C

BUILDING CHRONOLOGY:

1887- 1888`	Hospital Steward's Quarters completed. Total cost \$795
before 1905	Form 173A prepared in 1905 lists building with 325 square foot addition to the original 18' 6" x 23' 6" building. The addition was on the rear of the building, since photos show the other elevations without an addition
1910	Install refrigerator
1918	Maintenance expenditure of \$10.00
1919	Maintenance expenditure of \$258.00
1920	Maintenance expenditure of \$170.00
1921	Maintenance expenditure of \$124.00

1922	Maintenance expenditure of \$ 50.00
1924	Maintenance expenditure of \$ 47.91
1925	Maintenance expenditure of \$ 5.69
1926	Maintenance expenditure of \$ 14.48
1927	Maintenance expenditure of \$ 45.00
1928	Maintenance expenditure of \$ 142.60
1929	Maintenance expenditure of \$ 87.00
1932	Install electric range Install water heater
1934	General Order #21 Oct. 9, 1934 changes building name to Hospital Sergeant's Quarters
1936	Install new electrical service Interior and exterior painting
1940	Install gas water heater
1949	Replace original roofing with red cedar shingles
1952	Building moved from original site west of the Post Hospital to new site east of Building 607. Plans on file show underground garage on east side with bedroom and bath over the garage on the first floor and another bedroom and bath on the second floor. A new kitchen was added to the rear of the house at this time also.

SIGNIFICANT FEATURES

EXTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Three-sided projecting bay on the lower façade
- Decorative purlins support eaves
- Horizontal drop siding and corner boards

- Tall, narrow windows
- Roofing material (wood shingles)
- Siding
- Brick chimney (not painted)

EXTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- Roofing material (composition)
- Exterior lighting and wiring
- Entry and rear storm doors
- Basement windows, rear addition windows
- Replacement doors

INTERIOR ELEMENTS SENSITIVE TO ALTERATION

- Window and door trim where original
- Lighting fixtures in period
- Fireplace detail
- Hardwood floors
- Stairwell millwork
- Doors

INTERIOR ELEMENTS LESS SENSITIVE TO ALTERATION

- New interior doors
- Bathroom fixtures
- Kitchen fixtures
- Floor materials

-Replacement window trim

-Interior of additions

OVERALL INTEGRITY

Building 631 retains some elements of integrity on the exterior, but it is compromised by the extensive east-side addition (1952) which doubled the size of the building. The pre-1905 frame addition on the rear is historic and not intrusive to the front elevation.

DATE OF SITE VISIT 6/7/02

SOURCES

Erigero, Patricia C., "Draft Historic Overview and Evaluation of Significant Resources of Vancouver Barracks, Fort Vancouver, Providence Academy, Kaiser Shipyards." Seattle: National Park Service, 1992.

Erigero, Patricia C., and Terri A. Taylor. Cultural Landscape Report: Fort Vancouver National Historic Site 2 vols. Seattle: National Park Service, 1992.

Gressinger, Walter, Architects. *Maintenance and Repair Manual for Historic Structures, Vancouver Barracks, Washington*. Seattle: Seattle District, US Army Corps of Engineers, n.d.

National Archives, Record Group 77, Entry 391, "Construction Completion Reports, Vancouver Barracks Washington."

National Archives, Record Group 92, Entry 217074, Box 4944; "List of All Post Buildings at Vancouver Barracks built on or before January 15, 1909."

Quartermaster General Form 173A series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 117 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Quartermaster General Form 515/111 series, on file, Post Engineering Office, Vancouver Barracks, Washington.

Van Arsdol, Ted. *Northwest Bastion: The US Army Barracks at Vancouver. 1849 -1916* Vancouver: Heritage Trust, 1991.



Figure 631-1 Front elevation,
faces north

Figure 631-2 Side elevation, faces
west

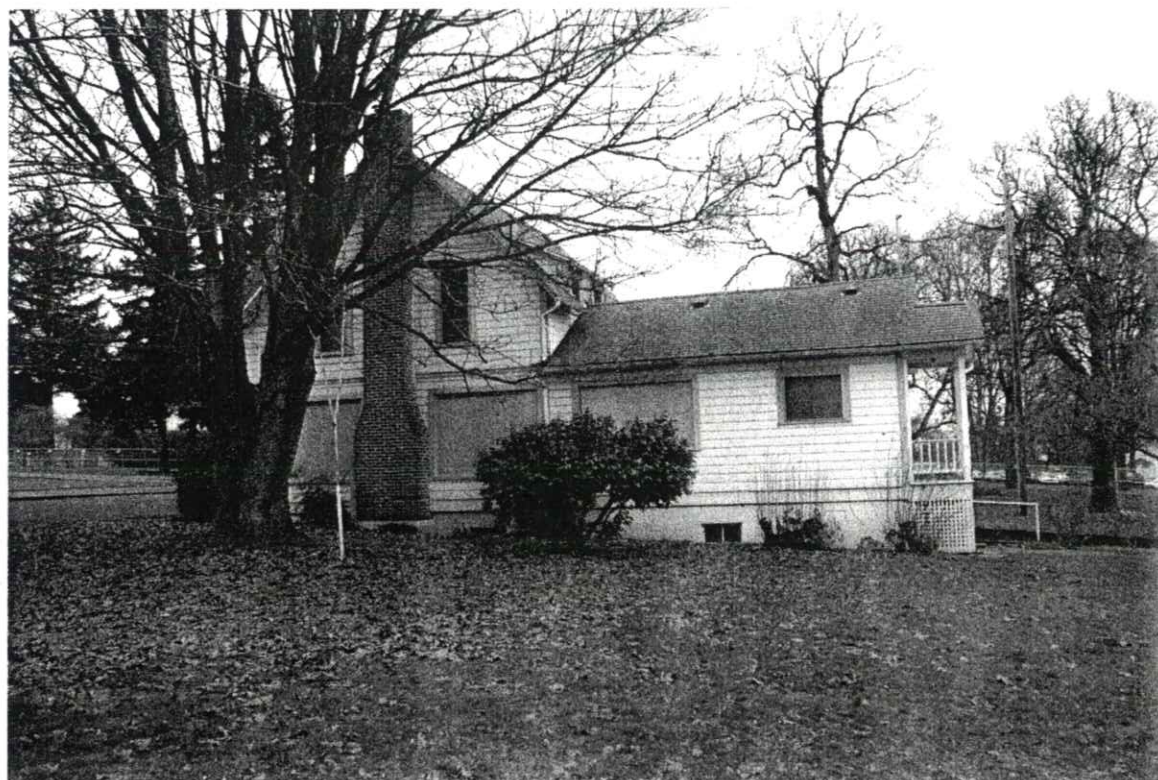




Figure 631-3 Rear elevation, faces south

Figure 631-4 Side elevation, faces east



Figure 631-5 Detail of polygonal bay on front elevation

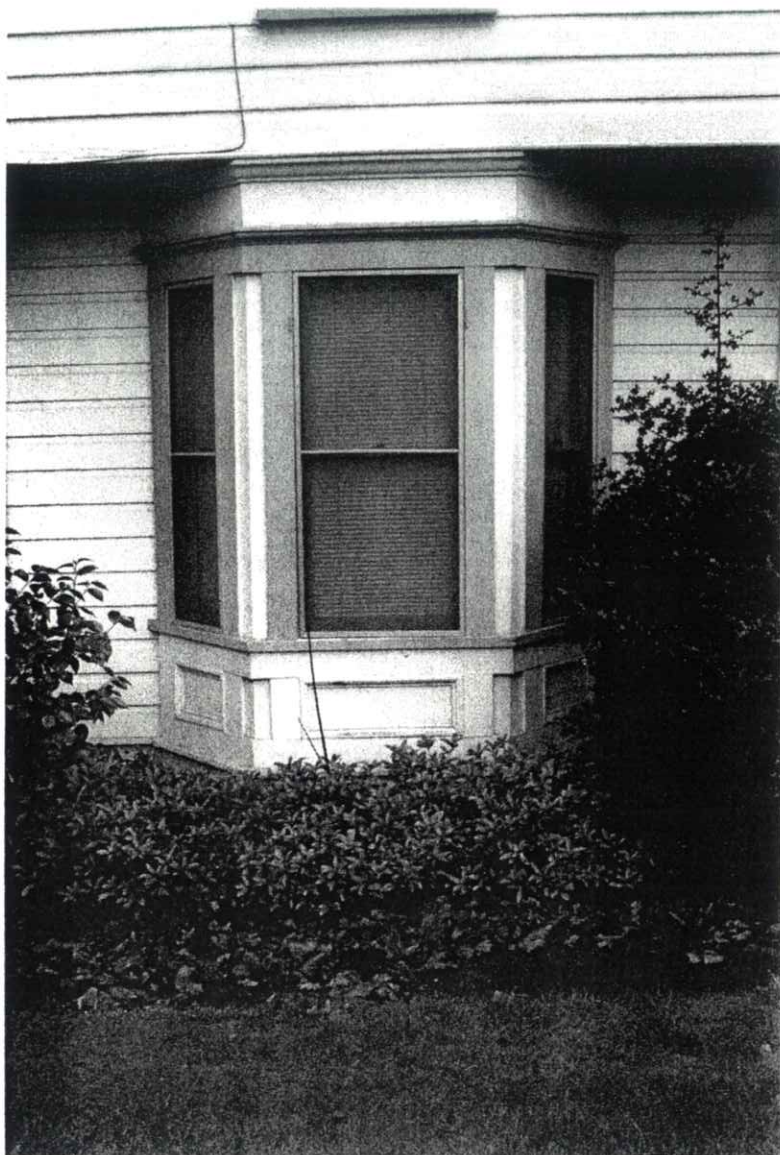


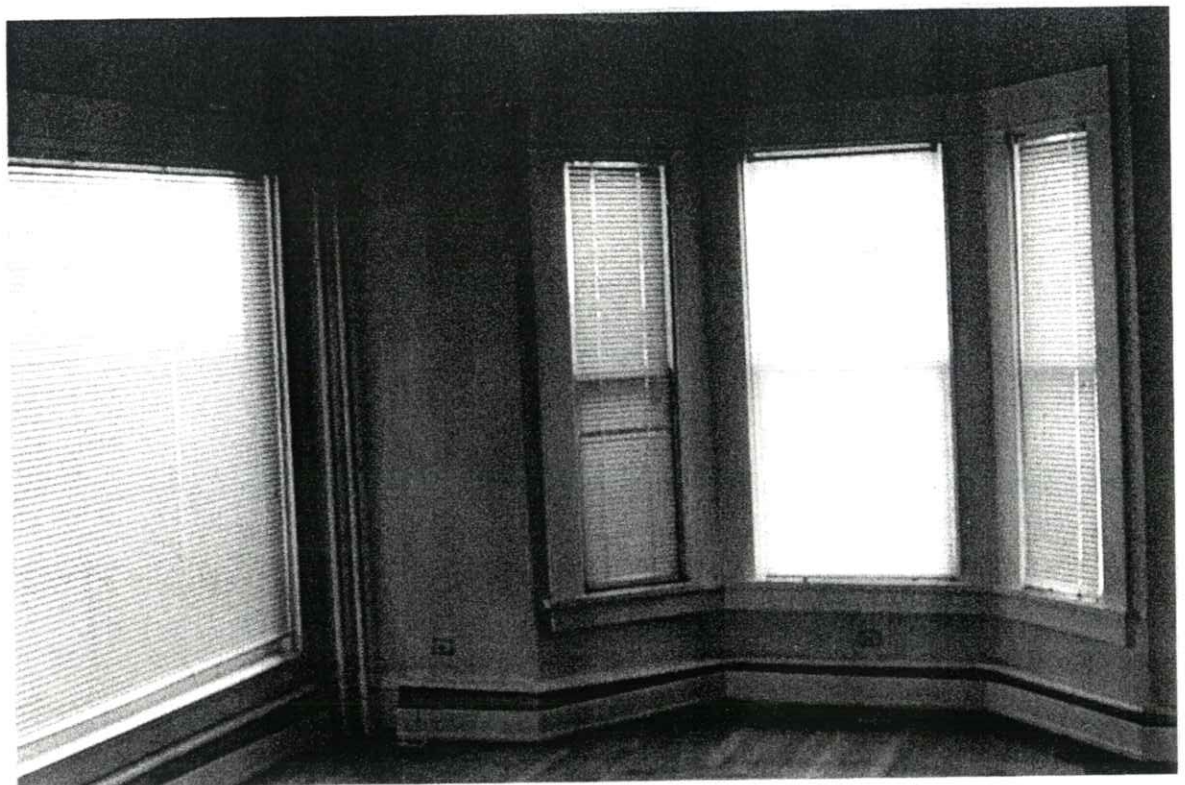
Figure 631-6 Detail of purlins





Figure 631-7 Interior, upstairs
banister

Figure 631-8 Interior, front
polygonal bay



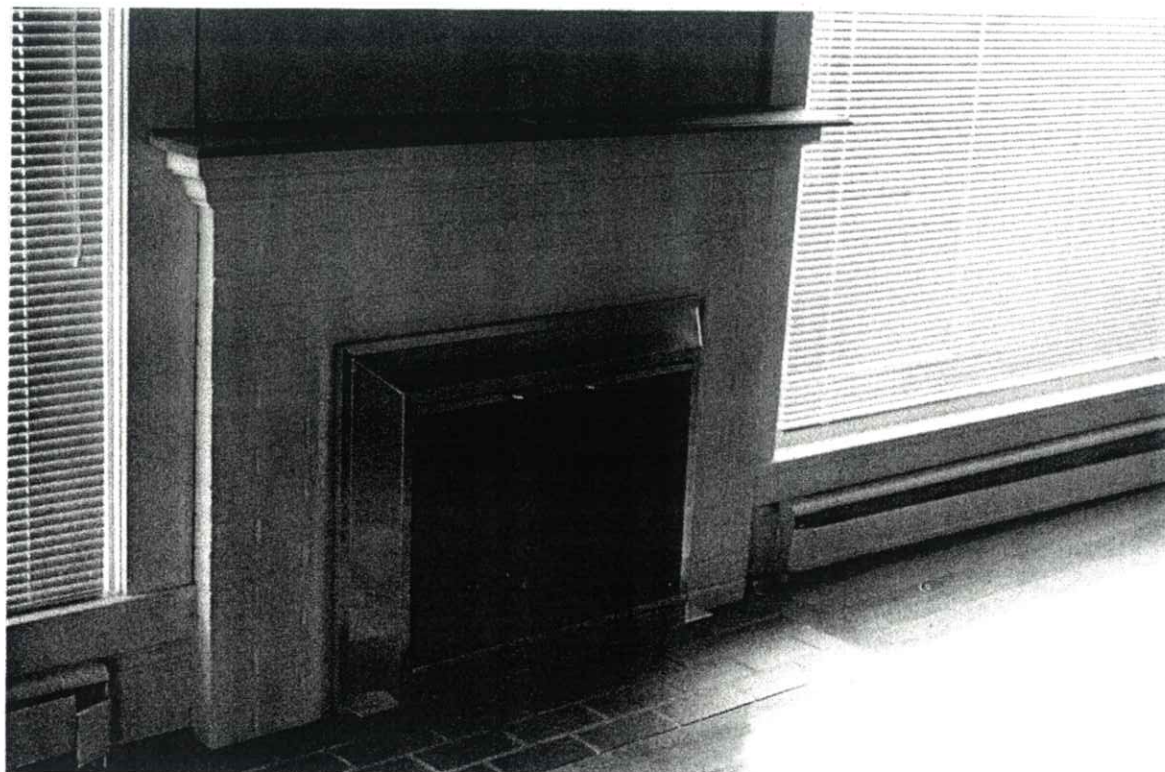


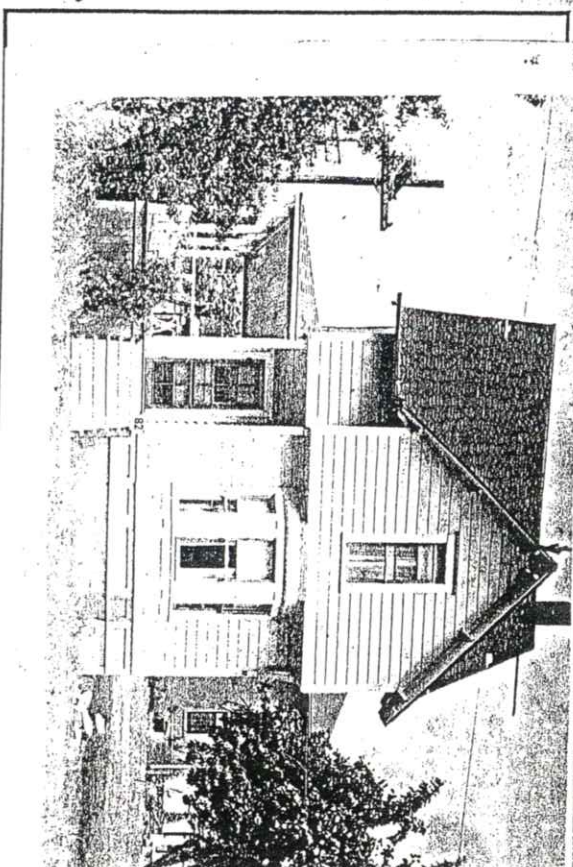
Figure 631-9 Interior, fireplace in living room

Figure 631-10 Interior, light fixture



Place Tacoma River Barracks, Washington.Designation of building Hosp. Stewards QuartersTotal cost, \$ 795.00Date completed 1887-88Capacity 1 FamilyMaterial: Walls FrameShingleRoof ShingleFoundation Brick PiersWood WoodTotal floor area above basement, square feet 1153Size: Main building 18'6" x 23'6"Wings NoneBasement NoneIndividual Stoves NoneHeight of first floor above ground 1 foot 6 inchesHow lighted ElectricityHot Air NoneWater connections YesSewer connections YesGas connections NoMETERS INSTALLED NoneCooking Ranges Installed None

Abram Cox Hot Water Boiler - 40 gal. Tank.

Refrigerators Installed NoneCooling Ranges Installed NoneRefrigerators Installed NoneMeters Installed NoneGas connections NoneElectric connections NoneSewer connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NoneWater connections NoneSewer connections NoneGas connections NoneElectric connections NoneSewer connections NoneGas connections NonePost Plan No. 631Building No. 62O.Q.M.C.: Plan No. 62

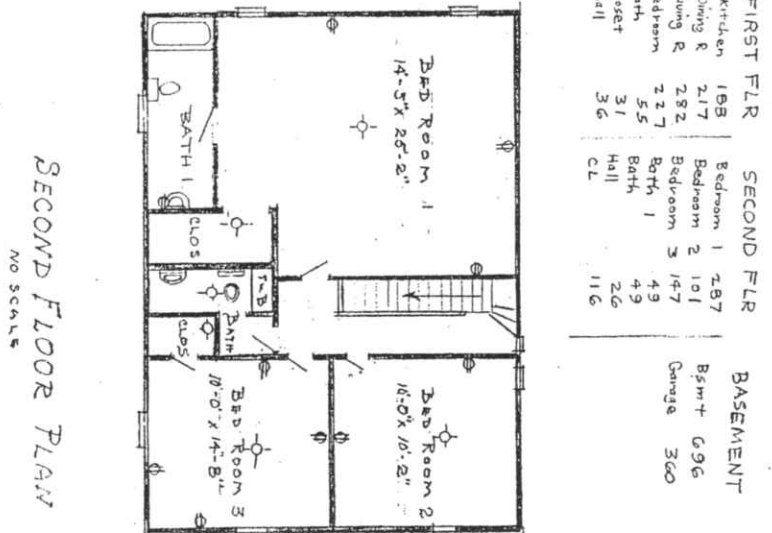
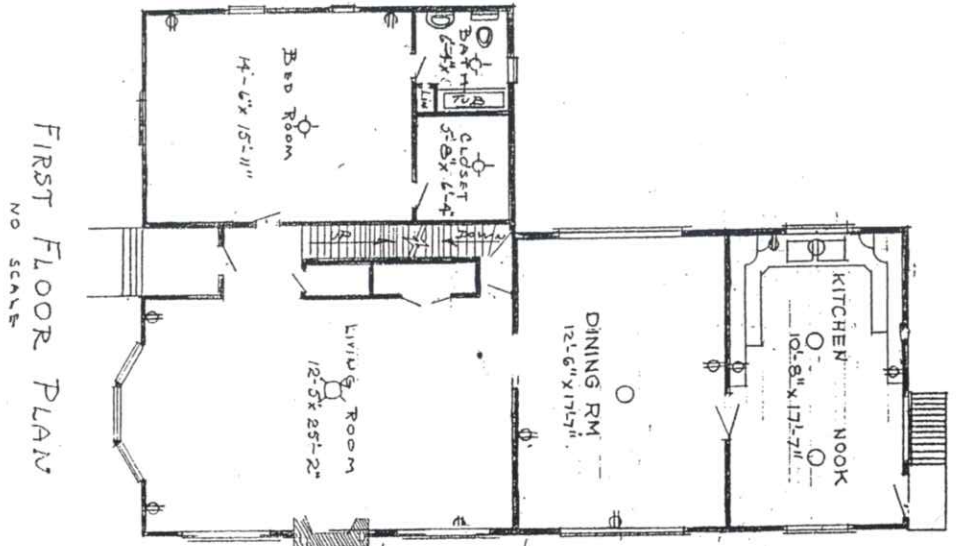
ADDITIONS AND INSTALLATIONS

(Below enter chronologically all modifications, additions, introductions of water, sewer, lights, heating, etc.)

ON Post Oct 1883

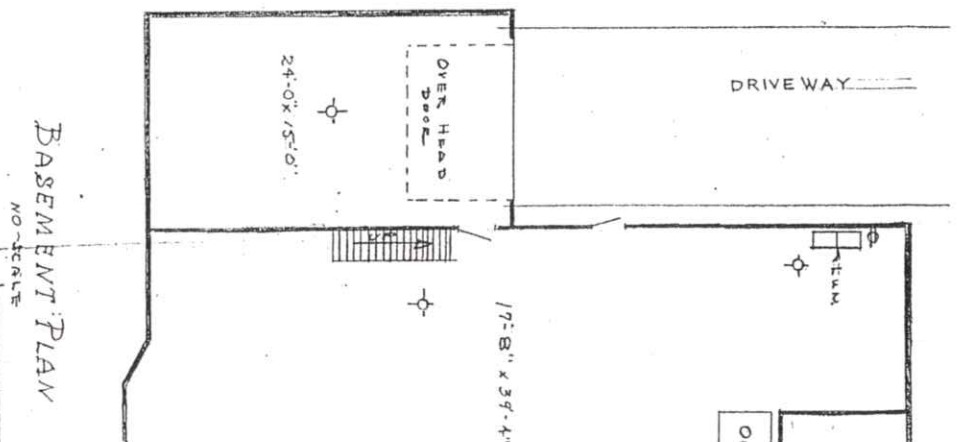
DATE	DESCRIPTION	COST	DATE	COST
Aug 1/36	Exterior and interior repainted Material & Labor	\$90.95		
Dec 5/36	Installed Panel, Switch, main. SN, FM, 220 volt	\$8.78		
May 1949	Re-nov. of 1st Cedar Shingles (Contract)	332.50		

Figure 631-12 QMO Form 117



FIRST FLR		SECOND FLR		BASEMENT	
Kitchen	158	Bedroom 1	287	Bsm't	696
Dining R	217	Bedroom 2	101	Gange	360
Living R	282	Bedroom 3	147		
Bedroom	227	Bath 1	49		
Bath	55	Bath	49		
closet	31	Hall	26		
Hall	36	CL	116		

Total 2874 sq ft



BUILDING NO 631

Figure 631-13 [1952] plans, sheet 1